A COMPUSERVE PUBLICATION PRINTED MONTHLY/ONLINE DAILY

ONLINE TODAY

THE COMPUTER COMMUNICATIONS MAGAZINE

June, 1987 $2.50

BLAST OFF

Students Launch Spaceflight Project

HIGH RETURNS

NAIC Forum Teaches Investment Strategies

POWER PLAY

Gamers Match Wits, Conquer Electronic Empires

"Fast and powerful... like NewsNet."

"Some kind of fancy import?"
"Made in the U.S.A. NewsNet is my online business news service with round-the-clock access."

"Power steering?"
"Power everything, with NewsNet."

Once I'm online with NewsNet, I have access to over 300 business journals, as well as wire services, credit reports, stock quotes and airfares. I just tell NewsNet to SEARCH, if I'm looking for a certain topic, SCAN, if I want to read headlines, or READ, if I want to read articles or reports. Every day, I make better business decisions because of NewsNet.

"How well does it respond?"
"I've got fingertip control."

NewsNet gives me NewsFlash, the electronic clipping service that automatically keeps an eye open for my key business interests. It constantly scans the 3,000 articles that enter NewsNet every day, retaining all the important stories. Every time I sign on, new articles are waiting for me. I don't waste a minute getting the news I need.

"Tell me about financing."
"You won't need to visit the bank."

I subscribe to NewsNet for only $15 a month, plus online charges that start at $24 an hour. Since the average newsletter costs $200 a year in print, I have access to over $60,000 worth of business news through NewsNet. For businesspeople who want to stay well-informed, NewsNet can't be beat.

NewsNet and NewsFlash are registered service marks of NewsNet, Inc.

Take NewsNet out for a test drive.
Subscribe now or call for our brochure.

800-345-1301

(in PA 215-527-8030)

NEWSNET

GO OLI or circle 1 on the Reader Service Form.

PIPELINE!

Customize your own market analyses by going ON-LINE with Instant Demographics™

The world's largest up-to-date database of demographic and buying power facts and forecasts is now available for hands-on use by you and your staff.

The exact marketing data you need to make better business decisions is as close as the keyboard on your PC or terminal. With Instant Demographics ON-LINE service, it takes only minutes to identify emerging demographic trends, income distribution shifts, and consumer buying patterns in any market areas you choose.

Experts and novices alike will find this menu-driven program flexible and easy to use. You can search, screen, and rank-order more than 16 million income, demographic, and sales potential data items.

Access through CompuServe or other time-sharing networks.

Or, if you're not ON-LINE today, let a CACI Market Specialist recommend one that would best serve your overall business information needs. In either case, each month you "pay as you go"—for one report or 1,000—depending on your data needs.

You define your exact marketing area.

CACI's Instant Demographics ON-LINE lets you run custom reports on your target area—whatever and wherever it is. Choose ZIP codes, counties, census tracts, or circles of any radii. Markets of any size or shape anywhere in the U.S. Thousands of customized reports available instantly.

Select the demographic variables most important to you and your markets: age, race, occupation, household income, whatever. Or zero in on product related data—sales potential and consumer spending power.

Reliable data that will help you make informed decisions on site evaluation, market entry, product mix, promotion planning, customer profiling. Choose from any of more than 40 available reports, create your own reports, or ask for a custom extract of data that can be used in-house.

"You, too, can pipe into CACI's ultimate source of market data."

Incomparable CACI Data.

The farther away we get from the last census, the more valuable are CACI's proprietary current year updates and 5-year forecasts of key variables. The members of CACI's unique Board of Demographers are nationally renowned experts. CACI's internal Demographic Center continuously refines data to its most exquisite and most useful form.

Call us.

1-800-292-2224 (press #3). Ask for ON-LINE and Custom Data Services. In Virginia, call 703-876-2334. GO DEM

CACI/ **Instant Demographics**

Market Intelligence for Decision Makers.™

8260 Willow Oaks Corporate Drive, Fairfax, VA 22031

New York • Washington, D.C. • Los Angeles • London • Amsterdam.

SITELINE and Market Intelligence for Decision Makers are service marks of CACI, Inc. Federal.

GO OLI or circle 2 on the Reader Service Form.

CONTENTS

PRINT EDITION

FEATURE

15 Gamers Gather Online
Improve your playing strategies by picking up tips from expert gamers.

UPDATE

22 Ready to Take a Chance
Online contests are more than fun and games; some players compete for recognition and prizes.

23 Preparing for Takeoff
Aviation Forum members plan "fly-in" to meet in person.

26 Students Launch Space Project
Through CompuServe, Norfolk, Va., students are designing a space capsule and involving teachers and students worldwide.

BUSINESS

42 NAIC Forum Trains Investors
Experienced and new investors can learn more about a company's operations and management through the NAIC Forum.

43 PRLink Joins PR Forum
The merger of two forums has created a unique source of tips, case studies and contacts for public relations professionals.

REVIEWS

44 Hardware
Hewlett-Packard's 7475A *graphics plotter from Hewlett-Packard Co.*
FiveStar FS286 File Server *from FiveStar Electronics*
Visionary 1200XT *modem from Visionary Electronics*

48 Software
Relay Silver *communications program from VM Personal Computing*
Graph-In-The-Box *charting program from New England Software*
MindWrite *outliner/word processor from MindWork Software*
Clan *practical accounting package from Sir-Tech Software*

54 Books
The Complete Desktop Publisher—*COMPUTE! Publications*
dBase Demystified—*Byte Books/McGraw-Hill*
Advanced WordPerfect—*Osborne/McGraw-Hill*
Command Performance—*Microsoft Press*

DEPARTMENTS

4 *Dear Reader*
6 *Letters*
8 *Monitor*
11 *Beginner's Corner* with David Peyton
24 *Inside The Electronic Mall*
28 *New Product Updates*
29 *Ask Customer Service*
30 *Uploads: New Forum Files*
43 *Business Briefs*
56 *Industry Watch*
60 *Online* with Charles Bowen

Online Today is published monthly in the United States of America by CompuServe Incorporated, 5000 Arlington Centre Blvd., Columbus, OH 43220. Application to mail at Second-Class postage rates is pending at Columbus, Ohio, and additional mailing offices. POSTMASTER: Send address changes to *Online Today* Reader Administration, P.O. Box 20212, Columbus, OH 43220-2913.

ELECTRONIC EDITION

Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

GO OLT	**A GO-Page Directory** *of the day's top computer industry news and a summary of key OLT page numbers.*
OLT-160	**The Monitor Daily News** *main menu.*
OLT-90	**Today's Computer and Information Industry News.**
OLT-20	**The Current Week's Monitor News.**
OLT-130	**Behind the Screens.** *Computer and information industry news, rumor and gossip.*
OLT-50	**CompuServe Update** *main menu. Lists all CompuServe news departments.*
OLT-70	**What's New on CompuServe.**
OLT-80	**CompuServe Community News.**
OLT-120	**Forum Conference Schedules.**
OLT-140	**Beginner's Corner.**
OLT-175	**Columns by Dan Gutman.**
OLT-3500	**Online with Charles Bowen.**
OLT-3700	**Uploads.** *A bi-weekly column summarizing new files in forum data libraries.*
OLT-1000	**Computer Events Calendar.**
OLT-2000	**OLT Special Reports.**
OLT-3000	**Computer Legislation Database.**
OLT-30	**Letters to the Editor** *main menu.*
OLT-200	**Electronic Edition Reviews** *main menu.*
OLT-220	**Hardware Reviews** *main menu.*
OLT-230	**Software Reviews** *main menu.*
OLT-240	**Book Reviews** *main menu.*
OLT-250	**New Product Announcements** *main menu.*
EBB-11	**Instructions** *on use of the Electronic Bounce Back reader service system.*
EBB-160	**Online Today Display Ads** *main menu.*
EBB-70	**Shopper's Guide.**

IT'S AS EASY AS "AXP"

ADVANCE

Enter GO AXP and instantly you're linked to the world of American Express® ADVANCE. Your convenient 24-hour source for Card, Travel, Investment, and Shopping services...

CARD SERVICES

Review your American Express® Card account–checking your monthly statement is quick and easy. Or find out about special Cardmember benefits, such as Be My Guest® Restaurant Gift Certificates. Even apply for the Card–obtaining an application has never been easier.

TRAVEL

Plan a family trip to sunny Florida. Or a tour of the exotic Far East. These are just a sample of the exciting vacations you can discover.

INVESTMENTS

Get help with personal financial planning from the experts at IDS. Or find investment advice from the professionals at Shearson Lehman Brothers.

SHOPPING

Visit the American Express® Merchandise Shop in the Electronic Mall.™ Shop for specially selected items from brand name electronics to great gift ideas. (Go AXM)

Enjoy the convenience of ADVANCE for no more than the standard CompuServe connect fees. All in the comfort of your home or office.

It's as easy as GO AXP.

AMERICAN EXPRESS®

Don't Stay Home Without Us.℠

GO OLI or circle 3 on the Reader Service Form.

DEAR READER

There are many reasons why computer gaming is so popular, but this month's cover feature author Dave Peyton probably puts it best: "Never too tired or otherwise occupied, it is always ready to play. It always tries its best. When it wins, it doesn't gloat unless you want it to. And if you tire of the game, you can walk away with no complaints from your opponent."

While CompuServe subscribers have plenty of solitary computer games to choose from, they also have the option of pitting their skills against old-fashioned human opponents who gloat when they win and whine when you try to walk away from the game. Nevertheless, it's difficult to replace the human element of gaming, and that's probably why CompuServe's interactive online games are even more enduring than their solitary counterparts. Interactive games retain the essential flavor of ordinary computer games while adding the "human drama" of competition.

We invite you to take a tour of CompuServe's gallery of games in this month's feature beginning on page 14 and find out why the interactive gaming section is such a booming community in Micropolis. You'll find tips on playing strategies and improving your game. You'll get an overview of the different types of games on CompuServe and information on how to get involved. Finally, on page 20, you'll find an up-to-date list of all the games on the service and the Quick Reference commands to reach them.

Good luck!

* * *

Speaking of games, you'll want to check into a roundup story about all the contests going on around CompuServe. In addition to the traditional game tournaments, there are competitions for prizes in such diverse areas as the Borland International Forum, the Artificial Intelligence Forum, and the Investors' Forum. For more details, read "Ready to Take a Chance" on page 22 of the Update section.

* * *

Don't forget about the fourth annual CB Seminar and Party to be held in Columbus on July 10 and 11. The seminar will feature panel discussions with CompuServe product marketing managers, digitizing of CBers for online pictures and a guided tour of CompuServe's facilities. For more details see the story on page 25 or enter GO CUP from most prompts on the Information Service.

Douglas G. Branstetter
Editor

ONLINE TODAY

***Online Today*®, June 1987**
Volume 6 Number 6

Publisher
Calvin F. Hamrick III
Editorial Director
Richard A. Baker
Editor
Douglas G. Branstetter
Art Director
Thom Misiak
Managing Editor
Mary Mitchell
Contributing Editors
Charles E. Bowen, Cathryn Conroy, John Edwards, Carole Houze Gerber, Ernest E. Mau, Byron T. Scott
Copy Editor
Kacy Cook
Assistant Editors
Richard Brownewell, Denise M. Erwin, Robert Loomis
Production Coordinator
Barbara Cagley
Photocomposition Coordinator
Susan Toombs

ADVERTISING SALES
Associate Publisher
Nanette M. Traetow, 5000 Arlington Centre Blvd., Columbus, OH 43220; 614/457-8600
Northeast Hajar Associates Inc., P.O. Box 345, Norwood, MA 02062; 617/769-8950; Paul Hajar, Carol Andersen
Mid Atlantic Nelson Associates Inc., 55 Scenic Dr., Hastings-on-Hudson, NY 10706; 914/478-0491; Bonnie Nelson
Southeast Fox Associates Inc., Suite 275, 6100 Lake Forrest Dr., Atlanta, GA 30328; 404/252-0968; Rick Gower, Fran Farmer
Midwest Kingwill Inc., 4433 W. Touhy Ave., Chicago, IL 60646; 312/675-5755; Dave Kingwill, Baird Kingwill
Northwest Fox Associates Inc., 870 Market St., San Francisco, CA 94102; 415/989-5804; Stephen E. Schwanz
West The Faust Co., 24050 Madison St., Suite 100, Torrance, CA 90505; 213/373-9604; Richard Faust, Doug Faust, Robyn Faust
Southwest Hajar Associates Inc., 2995 LBJ Freeway, Suite 200, Dallas, TX 75234; 214/888-1169; Barbara Jones

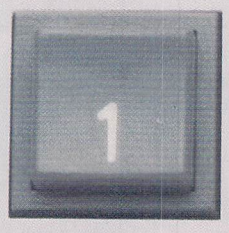
BPA MPA

President and Chief Executive Officer, Charles W. McCall; **Executive Vice President, Information Services**, Maurice A. Cox; **Executive Vice President, Business Services**, Robert J. Massey; **Executive Vice President and Chief Technical Officer, Support Services**, Alexander B. Trevor; **Executive Vice President, Network Services**, G. Clark Woodford; **Senior Vice President, Business Support and Development**, Barry F. Berkov; **Vice President, Systems**, Joseph R. Beauchamp; **Vice President, Research and Development**, Douglas P. Chinnock; **Vice President, Network Operations**, William G. DuVall; **Vice President, Product Development**, William F. Kuehnle; **Vice President, Market Development and Services**, John E. Meier; **Vice President**, George Minot; **Vice President, Human Resources**, Judith K. Reinhard; **Vice President, Software Services**, Charles W. Terry; **Vice President, Commercial Sales**, Gregory T. Tillar; **Vice President, Secretary and Treasurer**, Jeffrey T. Weisner; **Controller and Assistant Secretary**, Thomas J. Carr

Copyright©1987 by CompuServe Incorporated an H&R Block Company. All rights reserved. Contents may not be reproduced in whole or in part without written permission of publisher. *Online Today* is a registered trademark of CompuServe Incorporated. Printed in USA by R.R. Donnelley & Sons Co., Chicago. Subscriptions: United States, AFO—$30 one year; Canada and elsewhere $40 one year. Single copies $2.50 in US, AFO and Canada. Telephone: 614/457-8600. *Online Today* assumes no responsibility for return or safety of unsolicited matter. Direct editorial correspondence to: Editor, *Online Today*, P.O. Box 20212, Columbus, OH 43220. Advertising Reader Service: Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.

How to get from dial tone to CTS with UDS' new 224A/D

Push this, once

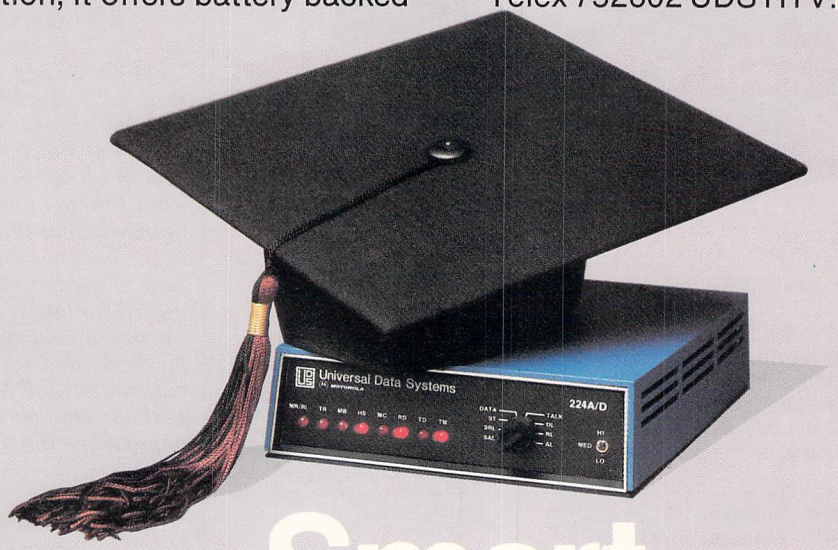


Here's a new user programmable, full duplex 2400 bps modem that can handle the entire auto-dial and log-on sequence with a single keystroke! It's the UDS 224A/D — the intelligent version of our 224.

It has all the advantages of our original 224, including V.22bis compliance at 2400 bps and Bell-compatible fallback rates of 1200 and 300 bps. In addition, it offers battery-backed memory storage for 10 numbers and their log-on sequences, keyboard or automatic dialing (pulse or tone), call progress monitoring and an impressive array of built-in test functions.

For detailed specifications, contact Universal Data Systems, 5000 Bradford Drive, Huntsville, AL 35805. Phone 205/721-8000; Telex 752602 UDS HTV.

NEW



Smart

Universal Data Systems

MOTOROLA INC.
Information Systems Group

UDS modems are offered nationally by leading distributors. Call the nearest UDS office for distributor listings in your area.

DISTRICT OFFICES: **Apple Valley,** MN, 612/432-2344 • **Atlanta,** GA, 404/998-2715 • **Aurora,** CO, 303/368-9000 • **Blue Bell,** PA, 215/643-2336 • **Boston,** MA, 617/875-8868 • **Columbus,** OH, 614/895-3025 • **East Brunswick,** NJ, 201/238-1515 • **Glenview,** IL, 312/998-8180 • **Houston,** TX, 713/988-5506 • **Huntsville,** AL, 205/721-8000 • **Issaquah,** WA, 206/392-9600 • **Livonia,** MI, 313/522-4750 • **Mesa,** AZ, 602/820-6611 • **Milwaukee,** WI, 414/273-8743 • **Mission Viejo,** CA, 714/770-4555 • **Mountain View,** CA, 415/969-3323 • **Richardson,** TX, 214/680-0002 • **St. Louis,** MO, 314/434-4919 • **Silver Spring,** MD, 301/942-8558 • **Tampa,** FL, 813/684-0615 • **Uniondale,** NY, 516/222-0918 • **Van Nuys,** CA, 818/891-3282 • **Willowdale,** Ont, Can, 416/495-0008

Created by Dayner/Hall, Inc., Winter Park, Florida

GO OLI or circle 4 on the Reader Service Form.

LETTERS

Services for Physicians

I just read with interest "Healthcare Information Services Save HMOs Time, Money" (March issue, p. 24). What services are available for the private physician not affiliated with a health maintenance organization?

Donald H. Marks, M.D.
San Francisco, Calif.

Editor's Note: CompuServe offers access to the National Library of Medicine's Medline database through a service called PaperChase (GO PCH). Other medical services include an online forum for physicians (GO MEDSIG), the Rare Disease Database (GO RDB), and the HealthNet database (GO HNT) and Health Forum (GO HCM).

Each issue of *Online Today* is filled with information which CompuServe subscribers benefit from having close at hand for reference.

Use these handsome binders and slip covers to store and protect your back and future editions.

Both styles of case are handcrafted in leather-like fabric, similar to the storage units used by libraries to shelve and preserve their periodicals. And the spines of all cases are embossed with the *Online Today* logo for easy identification on any bookshelf.

The binders open flat like a book and hold up to 12 magazines each with a sturdy cable that passes through the center pages of each issue.

The cases hold 12 unbound issues apiece — so that each can be removed for individual reference.

Mail to: Online Today Magazine
Jesse Jones Industries
Dept. OLT
499 East Erie Avenue
Philadelphia, PA 19134

Slipcases: $7.95 each
Binders: $9.95 each

Send me: ____ cases and/or ____ binders for *Online Today* Magazine.
Enclosed is $_____. Add $1 per unit postage and handling.

Charge (Minimum charge $15)
☐ American Express ☐ VISA ☐ MasterCard ☐ Diners Club
Card# _____ Exp. Date _____
Signature _____

Or Call Toll Free 1-800-972-5858 (Charge Orders Only)

Name _____
Address (No P.O. Box, Please) _____
City _____ State _____ Zip _____

Pa. residents add 6% sales tax.
Note: Satisfaction guaranteed by Jesse Jones Box Corp. (since 1943). Allow four to six weeks for delivery. Add $2.50 per unit for orders outside the U.S.

Silicon Visions

The review of *Silicon Visions* (March issue, p. 46) is more of an editorial than a review. The reviewer criticized the subjects about which I wrote, labeling the developments in the fields of artificial intelligence, telecommunications and human interface as "all beside the point." He made virtually no comments about the book itself.

His review was unfair and unfocused. The book is aimed at people who want or need to know what the next five years have in store. I may be right or wrong about what I think lies ahead, but I should not be taken to task for writing about it just because the reviewer prefers to solve more immediate and mundane problems.

Dan Shafer, author
Silicon Visions
Redwood City, Calif.

Mike Naver's response: The book reviewer's task is to discuss the book and the issues it raises. Given the limitations of space, an extended discussion of either was not possible. I made what I thought were the salient points—primarily that the futuristic speculation in the book was not particularly relevant to today's computer user in business, who has several current problems to solve including making the available hardware and software work for him. I can understand Mr. Shafer's viewpoint. Perhaps another reviewer would have approached the job differently.

Corrections

In the "Talking Terminal" article in Industry Watch (April issue, p. 59), the price listed is for Original Equipment Manufacturer buyers and not for individuals. The terminal, a third-generation integrated voice-data workstation called the Conversational Terminal, is available to individuals for $950 from Cermetek Microelectronics Inc.

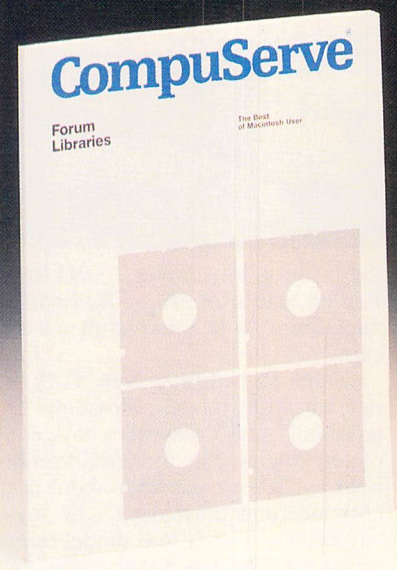
An error of omission occurred in "The 'Write' Stuff" (April issue, pages 22-23). In describing the involvement of CompuServe subscribers in the Tennessee Textbooks case (*Mozert v. Hawkins County Public Schools*), the article states that "the Literary Forum formed

a 'friends of the court' organization that will submit a legal brief stating their objections in hopes of reversing the decision when it goes to trial at a higher court.''

The 'friends of the court' organization referred to is not a Literary Forum endeavor. New York lawyer Brian Weiss founded and organized the group, called the Litforum Friends of the First Amendment (LFFA), through the Literary Forum, with the assistance of Alex Krislov, the sysop, and other interested Litforum members. Mr. Weiss wrote the amicus brief and it was through his efforts that the brief was accepted by the court. The appeal is pending in the Federal Sixth Circuit Court of Appeals in Cincinnati. Credit for this project belongs to the members of LFFA and to Mr. Weiss as their counsel.

Talk to Us

Online Today Electronic Edition has a Feedback area for letters to the editor. Simply type GO OLT-33 from any prompt in the CompuServe Information Service.



CompuServe®
Information Services

Personal Computing Data Libraries Exposed!

Fascinating software. These five Forum data library guides present the indexed descriptions of the top software offerings from leading CompuServe personal computing Forums — over 400 listings in each guide!

The Best of the Macintosh Users Forum and similar guides for the ***Amiga, Atari 8-Bit, Tandy Model 100,*** and ***IBMNET*** Forums, include descriptions for utility programs, stand-alone applications and other offerings available to download for use on your personal computer.

Order online. Simply type GO ORDER at any ! prompt. Guides are $9.95 plus $2.00 shipping and handling.

AT&T IS IN COMPUTERS. YOURS.

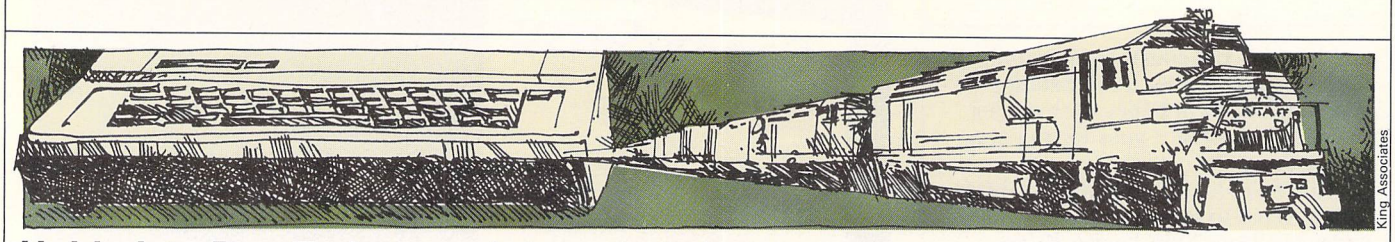
GO ATT and take advantage of AT&T SEARCH.
Access our on-line catalog of AT&T products and services.
Receive assistance in choosing the right one for you.
And enter our monthly contest for a chance to win the $25 Grand Prize!

FREE ON FATHER'S DAY
Sunday, June 21st

©1987 AT&T

AT&T
The right choice.

GO OLI or circle 6 on the Reader Service Form.



King Associates

Hobbyists Run Trains with Computers

Remember when putting together an electric train layout involved little more than snapping together a few sections of track, wiring up a transformer and running a plastic locomotive and some boxcars around an oval? Now, thanks to the ubiquitous computer, the world of model railroading can be infinitely more complex and intriguing.

Marklin Inc., a West German model train manufacturer, has developed a microcomputer-controlled railroading system that can handle as many as 80 trains on a single layout. The trains can run in opposite directions, behind one another, backward and forward. All switch throws are controlled by the computer, so never again will youngsters experience the thrill of seeing two passenger trains barreling toward each other on the same track (shucks).

"Digital operation makes the trains appear more realistic and makes wiring the layout a lot simpler," says Russell Larson, editor of *Model Railroading* magazine. "It is a revolutionary concept."

Frank DeNatale, a New York attorney who calls model railroading "a passion," says computers have completely altered the once tradition-bound hobby. "It's all you hear about at the club meetings these days," he says. "Everyone who is into model railroading as a hobby has either completely or partially converted to a digital layout."

Hobbyists interested in entering the world of digital railroading can expect to pay about $500 for Marklin's digital control system, not including locomotives and rolling stock. "You can easily blow thousands of dollars in this hobby," says DeNatale. "I guess it is like any hobby in that respect, but digital has made things a lot more costly."

Editor Larson, however, thinks the new equipment is worth the extra cost. "It definitely makes the hobby more enjoyable. You can concentrate on running the trains instead of worrying about throwing switches," he says.

Frederick E. Gates, president of Marklin's US subsidiary, Marklin Inc., believes that digital control is breathing new life into model railroading. "The dyed-in-the-wool buffs have always been there, but now we are seeing model railroading catching on once again with the general public. I think it is part of an overall trend back to traditional toys, although with a high-tech flavor." Gates says that more than one million digital and conventional train sets were sold during 1986.

DeNatale notes, "I still think it is the greatest hobby for a father and son to experience together. The computer aspect is making it more appealing to youngsters."

More information is available from Marklin Inc., 414/784-8854. In addition, CompuServe subscribers can find information about model railroading in Subtopic 10 of the Model Aviation Forum (GO MODELNET).

Griffith Supports Handicapped Users

Georgia Griffith is using computers—and her charisma—to assist handicapped persons in their high-tech pursuits.

Griffith, who is blind and deaf, serves as a forum administrator of CompuServe's Issues Forum (GO ISSUES) and Education Forum (GO EDFORUM) and is the information provider for the Handicapped Users' Database (GO HUD). Last fall the federal government took notice of her work.

Uncle Sam, under the auspices of the Arlington, Va.-based Center for Special Education Technology, is using the Handicapped Users' Database as a medium to answer the high-tech questions of parents and teachers of handicapped persons. All questions are answered by Griffith on a one-to-one basis. "It doesn't matter to me if I have 10 articles on a topic that people can read. I answer the question first and then tell them there are more details available," she explains.

Griffith answers an average of eight questions each week. All are placed in the feedback area of the Handicapped Users' Database. Typical questions include: Is there a large print program for my partially sighted 10-year-old son to use with an IBM PC? (Yes, PC Lens). How can I use my computer to communicate with a deaf friend with a TTD? (Tips on this procedure are in the Handicapped Users' Database.)

Greg Miller

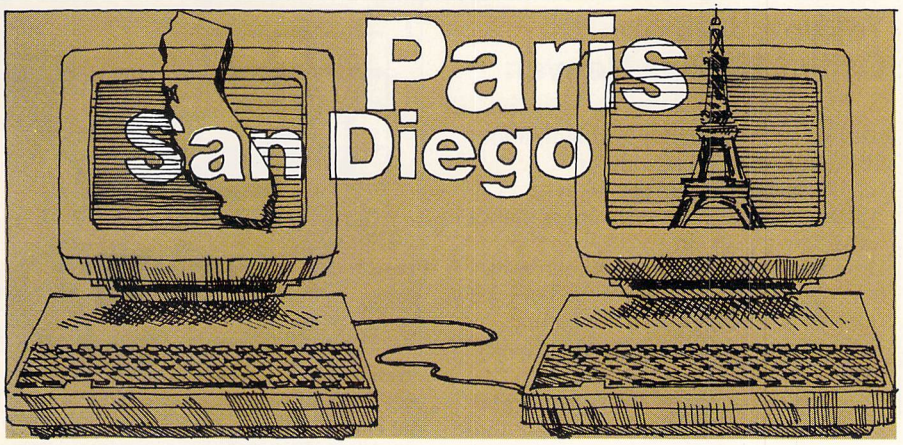
Helping the handicapped online: *Griffith*

In addition to having what she calls a "voracious memory," Griffith relies almost totally on CompuServe for her answers—her best online resources are the Educational Research Forum (GO EDRESEARCH), *Family Computing* (GO FAMCOM), all five IBM forums (GO IBMNET), Microsoft Forum (GO MSOFT) and the online news services (GO NEWS). "I'll go almost anywhere online if I think there may be an answer to help the parent of a handicapped person," she says.

"I think the most enjoyable part of the job is having a parent say, 'Oh, my daughter can run the computer all by herself now!' The wonder and delight are my rewards."

For more information, contact Georgia Griffith through the feedback area of the Handicapped Users' Database. The Center for Special Education Technology is located at 1920 Association Dr., Reston, VA 22091; 703/620-3660 or 800/345-TECH.

—Cathryn Conroy



The French Connection

Genevieve Gombert, a French entrepreneur who owns the Zooloo boutiques in San Diego and La Jolla, lives in San Diego but spends most of her time in Paris. After all, how authentic can a French boutique be if the buying is not done in France?

Gombert admits that the best solution would be for her to be in both places at once. Wishful thinking aside, she has created the next best thing—an electronic link-up via CompuServe from San Diego to Paris and the rest of the fashion world.

Besides maintaining close ties with the stores' manager, Gombert needs instant access to current figures on inventory, gross sales, cash flow and expenses.

"I studied different solutions and, finally, I chose CompuServe because it was the most reliable and inexpensive to use from Paris," she explains, noting that the cost is $20 an hour above the regular CompuServe connect charges.

In addition to keeping in contact with the boutiques, Gombert has expanded her electronic universe to include fashion wholesalers. "I send EasyPlex letters to them. With a nearly instant response, I can buy samples and have the wholesalers in the showroom for orders a few days later."

She admits that all this can be done as easily by Telex; however, it is more expensive than CompuServe. "When it costs just about 50 cents to send a whole letter on EasyPlex, I don't hesitate to explain everything in detail," she says. "Also, programs and data to update my computer files can't be sent on Telex, so you can imagine how important EasyPlex is to me. It has shrunk my world. I'm 6,000 miles away from my manager, but we feel close because we communicate each day on CompuServe."

Gombert says that logging on from Paris is quite simple and can be done with a local phone call and without subscribing to any special network.

Her instructions are as follows:

1. Dial the Paris phone number: 43 20 74 41.

2. After receiving the high-pitched tone, press the Return key.

3. Match the # sign, send "C" and press Return.

4. After receiving "center," send "CPS" and press the Return key.

5. Match "host name," send "CIS" and press Return.

6. You will then be prompted for your CompuServe User ID number and password.

Gombert adds that when logging on from anywhere in Europe, users must have a modem with a "CCITT" standard. Parameters should be set to full-duplex, 8-bit, no parity, 1200 baud. In addition, CompuServe's VIDTEX software is necessary or users risk being disconnected.

For more information on this procedure, subscribers from Paris may call Mr. Chan (who speaks English and French) at 47 76 41 14.

—Cathryn Conroy

Mind Over Minors

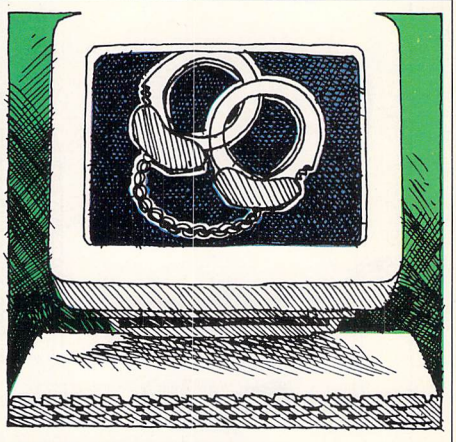
Teaching and maintaining discipline in a classroom is an art. For teachers who find their artistic ways in need of assistance, there is "Mind Over Minors."

Mind Over Minors is a software program written by five psychologists specializing in child behavior. It is designed to help teachers manage, motivate and even discipline students.

Teachers type in their personality profiles and the profiles of students under consideration. The program generates a report that is divided into five sections: understanding the student, improving relations, increasing performance, effective discipline strategy and suggested classroom activities.

The National Education Association has endorsed Mind Over Minors as "a useful tool for teachers in effectively managing behavior of a student."

For more information on Mind Over Minors, which requires an IBM, Apple or Commodore computer, contact Human Edge, 1875 S. Grant St., Suite 480, San Mateo, CA 94402-2669; 415/573-1593.



BBS Spotlights Crime Prevention

A novel way of using computers in law enforcement may be helping to lower the crime rate in a Texas town. Plano, Texas, has installed a crime prevention BBS that can be accessed by anyone with a modem. Equipment for the BBS was donated by local firms.

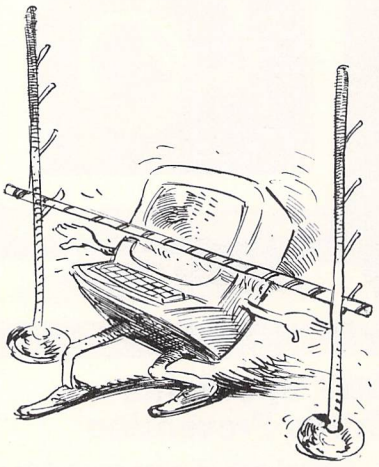
The data on the system is maintained by the Plano Police Department's Crime Prevention Unit. By spotlighting recent crimes, the BBS operators hope to prevent new crimes while solving some old ones.

The town has been divided into districts and users can dial in to see what has been happening in their areas. The readily available information keeps Plano's citizens informed about crime trends, and it allows quicker recovery of stolen property that has been publicized through the BBS.

For more details, contact Sgt. Pat Wertheim of the Plano Police Department, 214/424-5678 (voice) or 214/578-1311 (data).

—James Moran

To see how low we'll go on a new SLC, GT or Z, see your PC.



With the all new AUTOVISION available through The Electronic Mall,™ you can compare prices, lease terms and financing on any make or model new car. It's easy, just plug us in and say GO AV.

AUTOVISION

THE ELECTRONIC MALL

The Electronic Mall is a trademark of CompuServe, Inc.

GO OLI or circle 7 on the Reader Service Form.

Tokyo's Akihabara Called Hacker Heaven

When you die and go to computer nut heaven, it probably will look a lot like Tokyo's Akihabara district.

"Akihabara Denki-gai" (the Akihabara Electronic Village) is one of those few places on Earth, like the Grand Canyon or China's Great Wall, that truly has to be seen to be believed. Imagine a six-block area containing nearly 1,000 computer and electronics stores.

Some of the shops are so small that a single person can barely squeeze into their narrow confines. Other outlets are multilevel electronics department stores featuring a dazzling array of merchandise that makes the typical US computer store outlet look like a charity rummage sale.

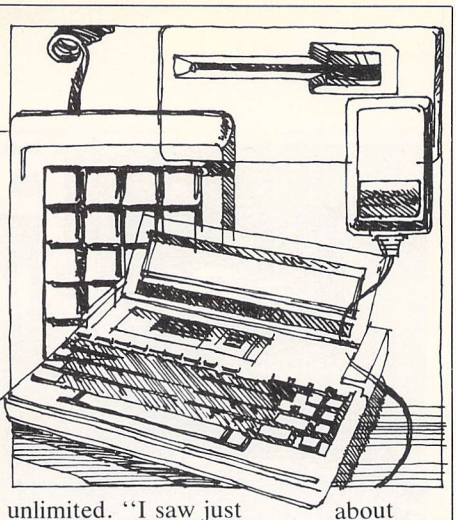
All of the stores, regardless of their size, contain many computer and electronics gadgets that will not reach the United States for at least another year or two. There are so many stores selling so many gadgets that area street vendors sell maps of the district—sort of a high-tech equivalent to Hollywood's maps of stars' homes.

As you might imagine, shopping at an Akihabara store is not exactly like walking into a low-key stateside ComputerLand outlet. The experience is something more akin to shopping at New York's 47th Street Photo, although faster paced and more polite.

Jim Thompson, a New York attorney who recently visited Tokyo on a business trip, fell in love with Akihabara at first sight. "It was a place I had heard about, and I have been dreaming of going there for some time," he says. "Fortunately, it did not disappoint me."

The computer buff's biggest problem is figuring out what to select from the staggering array of choices presented to the Akihabara shopper, according to Thompson. "There are so many different items to buy, you don't know what to grab first. The problem is that you have to bring everything home and get it through customs, so you can't buy too much. On the other hand, you want to get enough things to impress the folks back home." Thompson eventually settled on a digital tape recorder and a calculator with a built-in cigarette lighter.

Frank Metrino, a Huntington, N.Y., investment counselor who recently vacationed in Japan, says that Akihabara computer choices are nearly



unlimited. "I saw just about every brand of computer available in the United States plus about a hundred IBM PC clones I had never heard of," he says.

But Metrino observed that few stores carry the leading US software packages. "Software, at least US software, was hard to find. But I saw computers with heavy graphics capabilities."

Thompson notes that printers were very popular. "Laser printers, dot-matrix, thermal—about any sort of hard-copy device you would care to have on your desktop. I also saw what the Japanese call a 'wah-puro,' which is a combination computer/printer designed for word processing use. I have seen a couple of these machines on sale in America, but in Akihabara it seemed like every other store had a different model. Of course, in Akihabara, you see a lot of different models of everything. It is that kind of place."

—John Edwards

Certain Uncertainty

If you ever had the feeling that the person who bought your organization's local-area network is att least slightly confused, you're probably right.

A report recently issued by the Sierra Group, a Tempe, Ariz.,-based market research firm, states that more than 50 percent of the management information directors surveyed didn't know whether they would spend more, less or about the same amount on future LAN hardware acquisitions. Of those who did have plans, 25 percent said they would spend less and 19 percent said they planned to spend more. Forty percent of the directors said they didn't have a preferred vendor.

More information on the $1,200 report, titled "The Fortune 500 MIS Buying Plans," is available from the Sierra Group at 602/838-5074.

Online Ordering Service Is Worth Checking Out

Many new subscribers feel a reluctance about exploring CompuServe. They are afraid they'll find themselves someplace where they won't know what to do.

Many beginners avoid certain commands for fear something will happen they don't understand, resulting in a huge addition to their CompuServe bill. For instance, I've discovered that more than a few subscribers are afraid to type the command "GO ORDER."

A new subscriber recently asked me about terminal software for his Apple IIe. I recommended that he check out CompuServe's Online Ordering Service by typing GO ORDER at any system prompt to see what CompuServe has to offer.

"But what if I don't want to order anything?" he asked. It was then I realized that the command GO ORDER has a decisive ring to it. It would be easy for a new subscriber to assume the command results in some sort of financial commitment.

The command GO ORDER merely takes you to CompuServe's Online Ordering Service; it doesn't mean you have to order anything.

Perhaps the best news is that there are no connect-time charges while you're in the Online Ordering Service area. You are, however, assessed communications surcharges.

Another common fear is that some unwanted item will be ordered inadvertently. Anytime you're in the Online Ordering Service, you can view items chosen during that session by typing DIS (for display) at any prompt. After the items are displayed, you will be asked if you want to make a change in the order. If you have made a mistake, you can correct it then.

Finally, when you complete your online order, the entire order will be displayed for you to verify. At that point, you can change it or confirm that it is accurate. Then you'll be given an order number so you can check on the order later if necessary.

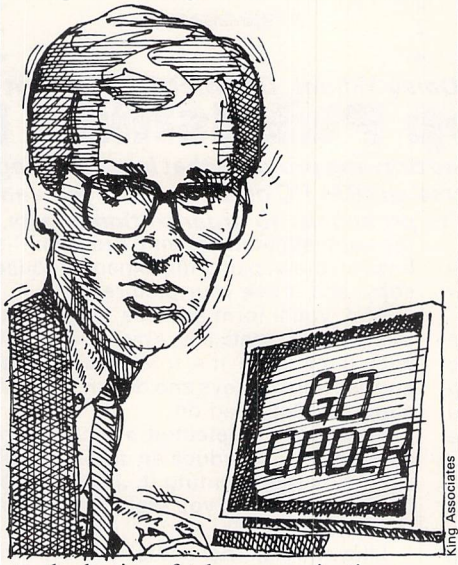
Here is a rundown of some of the products you will find in the Online Ordering Service:

The CompuServe Almanac, a comprehensive manual of services available on CompuServe, how to access them and what you can expect from them.

The CompuServe Information Service Users Guide, the same guide contained in the CompuServe Subscription Kit.

A new series of guides offering a printed guide to the best of the data library files in IBMNET, the Amiga Forum, the Atari 8-Bit Forum, the Tandy Model 100 Forum and the Macintosh Users Forum.

A Mini-Guide to Online, a fantastic book to give to friends who ask, "What are you doing and how are you doing it?" This guide is an introduction



to the basics of telecommunications presented as answers to the most common questions about hooking your computer to a telephone.

Guides to specific CompuServe services, including handbooks on how to use MicroQuote, the CB Simulator, EasyPlex, the National Bulletin Board and your own personal file area.

Guides to some of CompuServe's most popular interactive games—*MegaWars I, MegaWars III* and the *Island of Kesmai*. In addition to these specific game guides, there is a guide to all the games on CompuServe, permitting you to browse through the games and their instructions offline before going online to play them.

Communications software, perhaps the most important merchandise CompuServe has to offer. There is the Professional Connection for IBM machines and compatibles, and VIDTEX for non-IBM-compatible Tandy machines, the Commodore 64, the Apple family of computers and the Atari. Since this software was developed by CompuServe for use on CompuServe, you may find one of these programs is perfect for your needs.

An online description of the Executive Option and how you can subscribe to it. This is a simple, low-cost way of learning about the features of the Executive Option.

Back issues of *Online Today* magazine, each featuring a different focus on one or more aspects of networking or specific CompuServe services. If you're a new user, you may find useful information in these back issues.

You also can order CompuServe desk clocks, T-shirts and more. And you can do it all online without the hassle of sending an order through the mail. The cost of the items will be charged automatically to your CompuServe account.

I've explained to several new CompuServe subscribers about the Online Ordering Service, and they've found it to be not only convenient, but also an easy and pleasant way to shop.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

PROTECTED BY DES

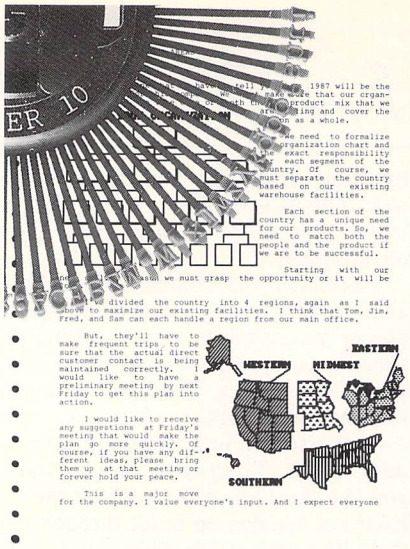
BUY AND SELL STOCKS

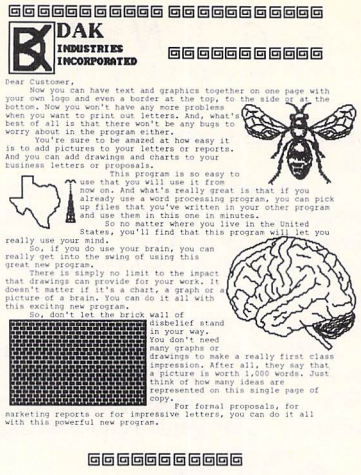
Our Tickerscreen® Direct Order Entry System is the First Commercial Application of the Data Encryption Standard.
All Account Numbers and Passwords are Encrypted.

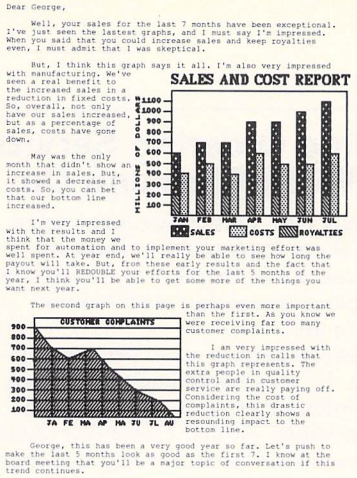
For A Free Brochure
On CompuServe
GO TKR
In The Electronic Mall
GO MU
Or Call Toll Free
(800) 223-6642
In New York
(212) 687-0705
Modem 5:00 PM - 9:00 AM
24 Hours Weekends
(212) 986-1660

MaxUle& Company Inc.
202 East 39th St.
NY, NY 10016

GO OLI or circle 8 on the Reader Service Form.







For Daisy Wheel, Dot Matrix & Ink Jet Printers

$89.90 Desktop Publishing Breakthrough

Imagine using a word processing and drawing program that lets you integrate charts and pictures that you 'paint' or 'clip' into your text. Well, if you use an IBM PC or Clone, now you can have graphically dramatic documents, from business or personal letters, to proposals, to organization charts, even with a daisy wheel printer.

By Drew Kaplan

It's easy. It's impressive. And, now your thoughts can be powerfully illustrated in both words and graphics.

After all, for illustrating abstract data and thoughts, nothing beats a dramatic chart or drawing. So, let your ideas leap off the page by using integrated text and graphics. Your thoughts are sure to make an impressive impact.

Whether you write letters, bank proposals, term papers, company manuals or news letters, you can forget complicated and expensive laser printing. And, you can forget complicated expensive desktop publishing programs.

Now for just $89.90, you can use your daisy wheel, dot matrix or ink jet printer to print normal text. Plus, you can integrate simply fabulous graphs and drawings into your creations.

INCREDIBLY EASY

Savtek, a brain trust group, has developed an easy to use yet incredibly sophisticated integrated word processing and graphics program.

Just create your letters, proposals, or reports as you would with any other word processor. In fact, if you **already** have a document created in virtually any other word processor, you can 'grab' it into Savtek's instantly.

You'll produce visually powerful technical papers and manuals with drawings and charts, and dramatic marketing reports with graphs. You'll produce sales proposals with panache.

And since there's no complicated training needed (if you can run a word processor, you can run Savtek), you'll make great impressions, fast.

Anyway, once you've created the written part of your report, using Savtek's sophisticated automatic word processing features, you're ready to add pictures, charts and graphs.

Just select from the over 100 supplied changeable pictures or draw your own, using the automated ICON based drawing program.

Later, you'll learn much more about the sophisticated drawing program that lets you draw, paint, fill, expand, reduce, copy, and move your pictures.

And, you'll form squares, circles and triangles automatically. Anyone can draw with it because it's totally automated and uses arrow keys and doesn't require a mouse. But, read on.

Once you've selected a picture, the computer will produce an automatically sized box representing it. Just position the box wherever you want the picture to be in the text.

Like magic, the actual picture will appear and the text will automatically reformat itself around it.

And, speaking of reformatting, this program will automatically make page-breaks and recalculate each page as you write or edit. If you make an addition to page 1 of a 10 page report, the effect will ripple through all 10 pages.

So, whatever length you've chosen for each page (including headers, footers and automatic page numbering), will automatically be preserved.

You'll particularly like the cut and paste features of this word processing program which allow you to copy, move or delete sections of your text.

Of course, you'll have automatic Word-wrap, Hidden Hyphenation, Justified Smooth Right or Ragged Right text. Plus, you'll have Find, Replace and Search.

And look how you can format your document. There are 5 page templates called rulers which allow you to automatically set up your page.

You can select any right and/or left margins, your tabs, one, two or three line spacing, and the number of blank lines at the top and bottom of your page.

Each of the 5 rulers comes with different default settings. But, you can adjust and save them or change them and even use several at one time on a page.

HOW DO THE PRINTERS WORK?

I use a daisy wheel printer because I like my letters to look personal. I've always had to switch to a dot matrix printer for graphs and illustrations.

Unfortunately, I couldn't have my graphics on the same page as my text.

Now, because this program can use the period on the daisy wheel to create all the charts and graphic symbols you see within this ad, I don't need to switch printers any more.

And while it doesn't create the graphics as fast as a dot matrix, the quality is superb. Now my graphics can be impressively integrated into my text.

Note: Every single sample page shown in this ad, was printed out on my EXP 400 Silver Reed daisy wheel printer.

Note: This program does not produce two column news letters in a single action. Simply create a double length column and cut it when you have it printed.

No matter what printer you use, daisy wheel, dot matrix (with or without near letter quality printing) or ink jet (color or single color), you'll have powerful looking documents to really present your ideas in the most professional manner.

DESKTOP PUBLISHING

Desktop publishing is about the hottest category of computer programming. It seems that everyone has discovered the impact of combining text and graphics.

And **very** impressive presentations are just what Savtek's ETG Desktop publishing system provides for you.

Imagine leveraging the capabilities of your own IBM or Clone, your own printer and your own keyboard to produce the documents you see on these pages, with nothing else to buy.

THE 1000 WORD PICTURE

First a confession. I can't draw. That's why you don't see drawings in DAK's catalogs. But I've been amazed at how creative I can be with this paint program.

It's easy. You do everything with the arrow keys and the return key. By using the arrow keys you can draw in any direction with a choice of 12 brush shapes.

There's an erase function to eliminate anything you don't like. And here's my favorite function. UNDO is a function that works throughout this program.

. . .Next Page Please

. . .Publishing Continued

It simply removes the last thing you did. So, no matter what you do wrong, you're a button away from removing it.

If you don't want a solid line, just spray an area. It's like using a spray can.

Let's say you want to connect two points with a straight line. Use the Angle Line. It produces a computer generated straight line between any two points.

What if you want a circle? Just touch the return key. Then use the diagonal arrow key to enlarge or reduce the circle. If you use the up/down or right/left arrows, you'll get an ellipse.

In the same way you can create squares, rectangles or triangles. And you'll be amazed how many things, from houses to technical drawings, are made up of squares, rectangles, circles and triangles.

But, that's not all. You can choose any of 32 background patterns to fill in enclosed areas or broad lines. And if 32 isn't enough, you can design your own.

There's so much more. You can juggle a picture. Imagine, turning it over or sideways with the touch of a button.

You can copy or move a picture or even part of a picture right on the screen. So, draw it once and copy it or move it.

But, here's my favorite. You can enlarge or reduce any picture or part of a picture right on the screen. So you can change its size equally, or you can stretch it out or make it tall and thin. Wow!

There are 12 included font/sizes. So you can have large or small type in your choice of styles within a picture or integrated with your text.

And, each of the 12 font/sizes can be shown on the screen and printed normally, in bold, in italic, in outline, or in shadow. Plus, you can write normally across the page, up the page, down the page or upside down.

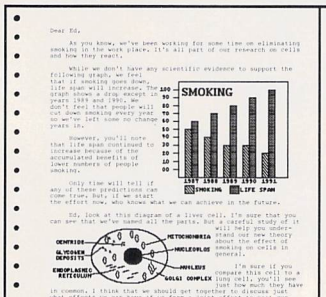
Finally, you can zoom into any small section of the screen and edit your pictures, pixel by pixel. With this kind of power, you don't need to be an artist, just have the ability to push a button.

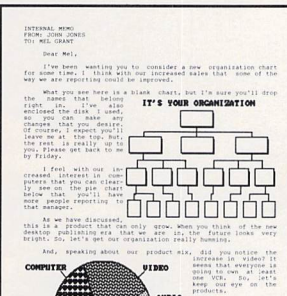
You can operate this Paint program independently. Or, you can access any picture from within word processing.

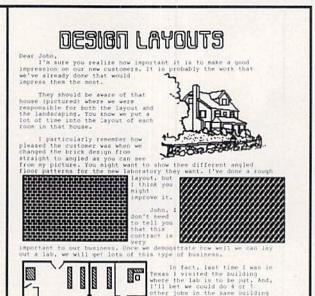
So, for banners and pictures, you can print directly from the Paint Program. Or, for everything previously described, simply access your pictures, captions, graphs or charts through the desktop publishing section.

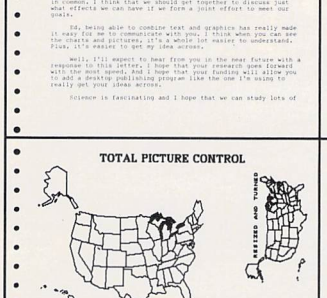
This program is incredibly powerful, yet you'll be comfortable using it within just a few hours.

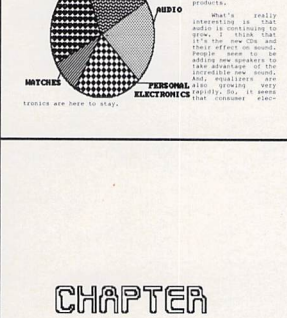
Every picture in this ad was created with this program. And, you haven't even seen the tip of the iceberg of its capabilities. For example, if you have a picture on the screen, you can bring a second picture up and join them together.

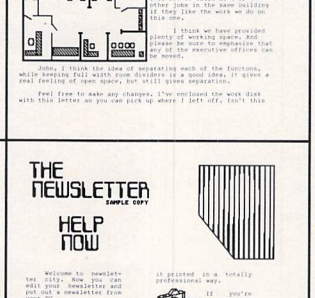


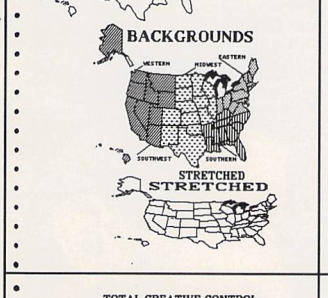


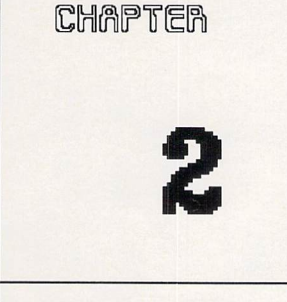


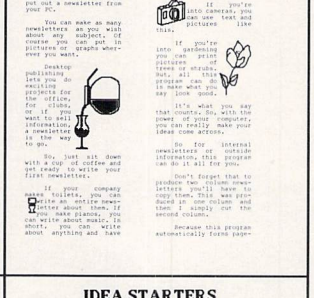












WHO CAN USE THE SYSTEM

All you need is an IBM PC, AT, XT or 100% compatible with standard IBM CGA or EGA graphics capability. It must have at least 256K, and either two floppy disk drives or one floppy and a hard disk.

Below is a list of some of the dot matrix, ink jet and daisy wheel printers that have been tested with this program. If your printer is compatible with any of these printers, it should work too.

Special Note: Most daisy wheel printers are Diablo 620/630 compatible, so they will work with this program.

Special Note: With a color printer you can print 3 colors plus black text.

C.Itoh 8510, **Epson** Fx-80, FX-85, FX-185, JX-80 (color), LQ-800, LQ1500, LX80, MX80 with Graftrex Plus or Graftrax, RX-80, **Hewlett Packard** 2225C Think Jet or QuietJet, LaserJet, or LaserJet Plus, **IBM** 80CPS Graphics Printer, IBM Proprinter, IBM 3852 Jetprinter (color), **Juki** 6100, **Mannesmann** Tally Spirit 80, **NEC** 3500, 3510, 3520, 3530, 3550, 5500 series, 8023A, NEC Pinwriter P5XL, P6, P7, (single or color), **OKIDATA** Microline 92, ML92, w/IBM Plug & Play, Microline 193, 20 (color), **Panasonic** KX-P1091, KX-P1091i, **Quadram** Quadjet (color), **Radio Shack** DMP-200, **Silver Reed** EXP 400, 600, 800 and all EXP series, **Star Micronics** SG-10, **Texas Instruments** 855, 865, **Xerox** (Diablo) 620, 630.

FINAL FACTS

There's a pop down calculator which lets you deposit your results right into your text. A clock/timer picks up the time from your computer, and there's a 7,300 year calendar. They are all available as pop-down windows. Savtek's program is backed by a standard limited software warranty /license. It comes with a superb, easy to use reference manual.

DESKTOP PUBLISHING FOR YOU RISK FREE

Make your ideas explode in front of your readers. When you send out a letter or proposal, let it be really dramatic. They will be your ideas, but you'll be presenting them like never before.

If you're not 100% satisfied, simply return it in unused condition within 30 days for a courteous refund.

To order Savtek's ETG Integrated Word Processing and Graphics Desktop Publishing System for your IBM PC or Clone, call toll free or send your check for the breakthrough price of just **$89.90** ($4 P&H) Order No. 4801. CA add tax.

Look at the 12 sample pages I created. You'll see graphs, pictures and charts mixed into my text. I even designed a logo for my newsletter. Just think about the impact you'll make when you present your ideas with a combination of text and graphics. And oh, it's so incredibly easy to use.

IBM is a registered trademark of International Business Machines.

DAK INDUSTRIES INC.

Call Toll Free For Credit Card Orders Only
24 Hours A Day 7 Days A Week

1-800-325-0800

For Toll Free Information, Call 6AM-5PM Monday-Friday PST

Technical Information. . . . 1-800-272-3200
Any Other Inquiries. 1-800-423-2866
8200 Remmet Ave., Canoga Park, CA 91304

Games

Players Gather Online to Match Wits, Socialize and Enter Fantasy Worlds

by David Peyton

Games have been around probably as long as civilized man. The ancient tombs of Egypt prove that this early race of people had games similar to our own. Even the early nomads who faced strenuous lives carried their games with them. In fact, one of their games, played with stones on a "game board" dug from the earth, survives today as a computer game often called *Pits and Stones*. The concepts of many games we play today have remained unchanged for thousands of years.

No matter the circumstances of the time, games have been there to divert, to soothe, to amuse.

It is little wonder then that games were designed on some of the earliest computers. Computer engineers marveled at the ability of those first behemoths to play tic-tac-toe and even win on occasion.

The computer may be the perfect gaming partner: Never too tired or otherwise occupied, it is always ready to play. It always tries its best. When it wins, it doesn't gloat unless you want it to. And if you tire of the game, you can simply walk away with no complaints from your opponent.

When network communications is added to computer gaming, the result is a super-gamer that would startle even the gamers of 50 years ago. With the communicative powers of the modern desktop machine, people linked through their own computers and a telephone network can play games across great distances. Players can match their wits against each other in an environment maintained by the computer or band together to match their collective wits against the computer. Or, they can play solitary games with a computer.

Patricia Fitzgibbons may be the pre-eminent gamer on CompuServe. Fitzgibbons is the administrator of two forums with the sole purpose of assisting CompuServe gamers: The Gamers' Forum (GO GAMERS) and the Multi-Player Games Forum (GO MPGAMES).

"People think it is primarily youngsters who play games on CompuServe, but I've found it to be the opposite. Most of them are adults, people who can afford the online connect time it takes to play these games," she says. Most of them are professionals or semi-professionals who are computer literate and anxious to find diversions, she has concluded.

"Most of the games on CompuServe

Greg Miller

Avid and casual players gravitate to games: *Penson*

Greg Newman

Gamers want leisure 'when they can grab it': *Fitzgibbons*

are suited for busy people," she says. "These people want leisure when they can grab it. Sometimes it is not until very late at night. And most of them cannot maintain a regular schedule of game playing. One day they may play for a couple of hours, then not again for several days. They want the games to be available when they are ready."

Fortunately for them, most CompuServe games are available on those terms, from the single-player games such as *Blackjack* to complex multiplayer games such as *MegaWars I*, *MegaWars III* and *SeaWAR*.

For example, the game show simulation *You Guessed It!* (GO YGI) is always open for "contestants" and anyone entering the lobby area is likely to find several people willing to form a team or those willing to play *You Guessed It!* one-on-one.

If you were trying to get a group of people together in your neighborhood to play a game, it would take a lot of planning and logistics, Fitzgibbons notes. Not so with *You Guessed It!* or the other multiplayer games.

Cynthia Penson, CompuServe's product marketing specialist for games, offers another perspective on CompuServe's gamers: "One group of subscribers is composed of avid game players who spend a large amount of online time either by themselves or with others in the complex games." These players work toward becoming highly skilled experts in the game or games they are devoted to, she says. The games for them seem to be challenges and social activities rather than merely diversions.

The other group Penson describes as "casual gamers who come across the games area and find something they like. Maybe they play *Football* or *Hangman* or something that's not quite as time-intensive as the more complex games."

CompuServe recognizes the needs of both groups, Penson says, and develops games for both types of players.

New games you might look for in the near future on CompuServe include *British Legends*, a fantasy role-playing game (also known as Multi-User Dragon, or MUD, in the United Kingdom), that will support a large number of players simultaneously. CompuServe is trying to find out more about the online games players' needs by conducting online surveys and one-on-one conversations with subscribers and attending games conventions.

Someone once said the more things change, the more they remain the same. And so it is with games. Though CompuServe's network has changed the way people play games, the nature of the games and the reasons they are played remain much as they have for centuries.

CompuServe and the desktop computer have only enhanced one of mankind's oldest leisure activities.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

Improve Your Game

How to Pick Up Playing Strategies Online

So you want to be a CompuServe gamer but you don't know where or how to start? You have nearly as many options for beginning your game experience on CompuServe as there are games on the system.

The games on CompuServe run the gamut from the simple to the most complex. For children there is the computer version of *Hangman* (GO HANGMAN). For those interested in computer history and gaming, CompuServe has the *Original Adventure*, (GO ORADVENT). The first adventure text game for computers, it was developed by students at the Massachusetts Institute of Technology in the early 1970s.

If you're not sure which games you want to play, you might begin with a list of the games available. Some of the games currently popular with subscribers are *Interactive Chess, Air Traffic Controller, Island of Kesmai, MegaWars I, MegaWars III* and *Advanced Digital Football*. By typing FIND GAMES at any prompt, you will get an alphabetical listing of current choices. You'll get the page where each game is located.

Once you choose the games you want to investigate, you'll find that all of them have online playing instructions. If you would like more extensive instructions and tips for the complex games, there is more help available from manuals and other gaming aids you can order online. By typing GO ORDER, you'll be taken to CompuServe's Online Ordering Service.

The "View Descriptions/Place Order" option from the main Order menu takes you to yet another menu offering "Games Merchandise." There you'll find the "Guide to CompuServe Games," which offers printed instructions for nearly all the games on CompuServe.

Detailed game guides for *MegaWars I, MegaWars III* and the multiplayer role-playing game *Island of Kesmai*, also are available.

Devotees may be interested in the game maps, posters, spaceship blueprints and T-shirts depicting scenes from some of the more popular games. If you decide to order any of the merchandise, the cost will be added to your CompuServe bill.

Photographic Illustrators/Tom Hogan

Casino Champion:

Shirley Shostack

Shirley Shostack of Dayton, Ohio, is hooked on blackjack. No, she's not a candidate for Gamblers Anonymous. Despite the fact that she loves the game, she has never played it face-to-face with another person and she hasn't won or lost a fortune.

All of her blackjack playing has been on CompuServe where she is "hooked" on playing *Multi-Player Blackjack* (GO MPBLACKJACK) for "credits" rather than cash.

When a player enters the *Multi-Player Blackjack* "casino," the system advances 1,000 credits for playing. The CompuServe system keeps tabs on how much is won or lost with each successive visit.

A big-time winner, Shostack had won more than 100,000 credits as of February. "I've talked to a lot of people who play blackjack on CompuServe and I've not met anyone who has more credits," she says. "I'm a late-night person and I find playing blackjack is a great way to unwind. I play several times a week, sometimes only 15 minutes at a time."

Multi-Player Blackjack not only allows people to play blackjack together but also it lets them talk to each other during and between games with the "Kibitz" command. "I've met all

kinds of people, including a president of a computer software company and the head of an electronics firm, from all over, including Alaska."

Away from the blackjack table, Shostack, who is retired, is a volunteer treasurer of Carriage Hill Farm, a working farm in the Dayton, Ohio parks system. She recently took a correspondence course in hieroglyphics and now spends as much time as possible translating ancient Egyptian writings.

Much of what she does, including playing blackjack, is under the watchful eyes of one of her six cats, including her favorite, Nefertiti. In fact, she sometimes uses the handle Nefertiti when playing *Multi-Player Blackjack* since the cat is usually on her lap when she sits down for a game. "But I never get as much attention as when I use the handle 'Hot Lips'," she says.

Shostack and her husband were married in Las Vegas and have returned there many times. "I usually play the poker machines in Las Vegas, and I'm proud of the fact that most of the time, I win enough to cover the cost of our trip."

Surprisingly, there's no secret to her winning ways on CompuServe's *Multi-Player Blackjack*, she says. "I always try to be the dealer if possible. But I have no particular method to winning. I'm not a card counter or anything like that. Maybe I'm just lucky at the game. When I go back to Las Vegas, I think I'll probably give the blackjack tables a try."

—DAP

In addition to the games guides, you can find instructional information online. An introduction to CompuServe games is available as option 1 off the Entertainment/Games menu. HELP files are available on page GAM-583. Within the games, specialized instructions are accessible from the game's first page, or "kickoff" page.

Written instructions help, but often they are not enough. Games are people projects and you often can learn more from experts. Messages left in Feedback (GO FEEDBACK) are answered by CompuServe game experts usually within 48 hours. In addition, two CompuServe forums offer help with the finer points of advanced game-playing.

Both the Multi-Player Games Forum (GO MPGAMES) and the Gamers' Forum (GO GAMERS) are administered by Patricia Fitzgibbons, an attorney in Long Beach, Calif.

Fitzgibbons, also known as "NightShift," got her first job on a forum as co-administrator of GameSIG (now known as the Gamers' Forum) which opened in November 1982. "The purpose of that forum was threefold," she says. "First, to exchange hints on how to get through the tough parts of computer games, particularly INFOCOM games. People kept getting stuck in the same spots.

"Second, we helped those playing the single-player online games such as *DEC Wars*, the precursor for *MegaWars*. Fitzgibbons adds, "People also had questions about the online Scott Adams games, so we helped them with hints and even walk-throughs."

"Finally, GameSIG was there to help users create their own online games, particularly role-playing games. Forum members began playing role-playing games in the conference area and later through messages on the forum's message board."

GameSIG grew in popularity, and the information on gaming included in its data libraries was put in a separate reading area, which eventually became *The Electronic Gamer* (GO EGAMER), an online gaming magazine that continues today.

In October 1985, Fitzgibbons became the administrator of both the Gamers' Forum and the Multi-Player Games Forum, a place where players and would-be players of CompuServe's most complex online games meet to discuss play, organize multiplayer games and teach others how to play.

"We know there are lots of users who are trying to learn how to play complex games on CompuServe and getting a bit frustrated in the process. Others are simply trying to find people with similar gaming interests and don't know where to turn. We have something for both groups in the gaming forums," Fitzgibbons says.

The Multi-Player Games Forum is the place to start if you want to learn how to play games such as *MegaWars I* or *MegaWars III*, *You Guessed It!*, *SeaWAR*, *Island of Kesmai* or the newest multiplayer game, *Air Traffic Controller*.

"We have everything a new player needs to get started playing these games. We have help files in our data libraries, but more important is the message board where questions are answered promptly. The people who play these games bend over backward to help newcomers learn how to play. The more players that are available, the better the experience for all," she says.

Message Sections 1 and 2 and Data Library 2 of the Multi-Player Games Forum are devoted to training for *MegaWars I* (GO MEGA1). Section 4 and Data Library 4 are devoted to *MegaWars III* training. If you're interested in playing *SeaWAR*, you'll find help in Message Section 5 and Data Library 5. *Island of Kesmai* training is available in Message Section 7 and Data Library 7.

Help with the new game, *Air Traffic Controller*, can be found in Data Library 8.

MegaWars I is a real-time space battle game for one to 10 players. The object is to destroy all enemy bases and ships and capture all enemy planets before the enemy does the same to you. By capturing neutral planets and building up defenses, you gain not only points but also allies who help you battle the enemy.

If you're interested in playing *MegaWars I*, you'll find textfiles and instructions offered from the game's kickoff page and in Data Library 2, including HELP.PT1 through HELP.PT5, five textfiles for the game's beginners. They deal with such issues as weapons systems, planet and base information, information on ship movement and the many commands used in the game. There is more training help in Message Section 2.

MegaWars III (GO MEGA3) consists of two separate phases. The interactive phase is where you fly your ship through the galaxy exploring for new planets to colonize and fighting enemies you encounter. It is similar to many other space combat games except that there is a strong emphasis on exploration.

The second phase of *MegaWars III* is an "economic model" where you manipulate the economies and populations of the bases you own. This is done outside the ship. *MegaWars III* allows for team play. Teams are formed either through pre-arrangement or through contact on the game's "hyperspace radio."

If your interests lie with *MegaWars III*, you'll find help files in Data Libraries 3 and 4 including: DUELRL.TXT, an official list of rules that should be followed when dueling other *MegaWars III* players; MEGA3.CBT, an article about how to play *MegaWars III* more effectively, including combat techniques and winning strategies; and ADVMAN, a copy of a training manual helpful to beginning and intermediate players wanting to improve their planetary management skills.

When you first enter the *Island of Kesmai* (GO IOK), you arrive on the dock south of a small town where you can outfit yourself for "the quest." There are two main entrances to a dungeon—one in the temple north of town and one in the ruins on the southwest corner of the island. You must explore the island and the dungeon to kill as many monsters as possible,

accumulate wealth and increase your skills. You can cooperate with other players or explore on your own, but a group has a much better chance of survival than an individual. The ultimate goal is to kill the dragon and steal his treasure.

Data Libraries 6 and 7 contain help files for those playing the *Island of Kesmai*. These include CLASS1.IOK through CLAS12.IOK (at this writing), which are transcripts of conferences held for beginning players and moderated by veteran *Island* players. Online conferences for beginners are held once or twice weekly in the forum's conference area. Announcements about these conferences can be found on the forum's short bulletin. As new conferences occur, transcripts are archived in Data Library 7.

SeaWAR, which also is supported on the Multi-Player Games Forum, can be played singly against the computer or against up to three human opponents. The object is to destroy all of your enemy's ships by commanding your own armada more skillfully than the computer or the other human players. Data Library 5 is designed for *SeaWAR*-related files.

Though relatively new, the *Air Traffic Controller* multiplayer game, also supported by the Multi-Player Games Forum, has a considerable following and is increasing in popularity, according to Fitzgibbons. *Air Traffic Controller* (GO ATC) is played on a grid in which you are the controller, bringing airplanes into your sectors of the grid and sending them on to other players who are managing airplanes adjacent to your area. It is a game of cooperation more than competition since sending airplanes into nearby grids in good flying shape generally means the other players will reciprocate. CompuServe's popular *You Guessed It!* game also is covered in the forum. Data Library 8 contains helpful hints on playing the game.

"New players of these games ought to check out the data library files about them in the Multi-Player Games Forum, but they shouldn't hesitate to ask questions on the message board either," says Fitzgibbons. "Not only will they learn about the games, but they'll meet others who play the games and, through the socializing, become part of the teams that play the games."

To leave or read messages about a particular game, subscribers can use specific subtopics in the forum. Subtopics 1 and 2 are dedicated to *MegaWars I*, and Subtopics 3 and 4 to *MegaWars III*, Subtopic 5 to *SeaWAR*, Subtopics 6 and 7 to *Island of Kesmai* and Subtopic 8 to *You Guessed It!*.

The Gamers' Forum (GO GAMERS) is the place for playing other kinds of online games. Most of them are the inventions of the members themselves.

"In The Gamers' Forum, you can play fantasy role-playing games with

An Expert Player Teaches Beginners

Call him Valis. That's not his real name, and yet, in a way it is.

"It is the name of my alter ego when I'm playing games," he says. "I think all of us like to have a place where our alter egos live and thrive, a place where we can turn to when the weight of the world gets us down."

That place for Valis is the *Island of Kesmai*, the complex, interactive game on CompuServe where monsters and treasures of immense proportions exist side by side, where danger and adventure await those prepared to explore.

The *Island of Kesmai* has similarities to other fantasy role-playing games. But Valis says he never played any of them them until he became hooked on playing the *Island of Kesmai*.

"I went to a college where students played live role-playing games," he says. "I could never get into sitting around eating crackers and cheese doodles and arguing for 12 hours at a time. I can do as much in a half hour in the *Island of Kesmai* as they did in 12 hours."

To prove it, Valis has mapped the entire island and the four-level dungeon beneath it. You'll find his maps of Kesmai in the data libraries on the Multi-Player Games Forum.

When you're playing the game, you see little of the Island at any given time," he says. "From time to time, people would create their own partial maps of the island but often they wouldn't share them. I made a map of the entire thing and put it in the Multi-Player Games Forum for all to see." The map shows the location of hallways and rooms, but it still leaves the player with decisions to make about how to destroy the game's monsters and get the treasures.

Valis has also created a special terminal program for IBM PCs and close compatibles. The terminal program, called IOKTERM, is specifically designed for playing *Island of Kesmai*. The program, which contains color displays of the Island, may be downloaded as IOKTRM.ARC from Data Library 6 of the Multi-Player Games Forum.

Although Valis may be one of the most experienced players of the *Island of Kesmai*, he's willing to help beginners. Valis offers beginners classes for the *Island of Kesmai* through the Multi-Player Games Forum.

"We think we've come up with the perfect way of teaching a beginners class," he says. "We spend an hour or so in the conference area with a lecture and questions. Then we go on a 'field trip' to the Island itself. I lead the beginners onto the Island where we encounter a few things and look for some treasure. That usually is enough to get them started."

To find out the latest schedule of beginners classes and field trips to the *Island of Kesmai*, check the short bulletin in the Multi-Player Games Forum (GO MPGAMES).

But if you meet Valis in a conference, don't expect to find out much about the person behind the name. When playing games and participating in the games forums, he'd just as soon be known as Valis, the alter ego of a person who loves gaming.

—DAP

other enthusiasts in the forum's conference area. You can play several strategy board games and find other users who want to play chess online. We have even started online bridge tournaments. One of our users has figured out how to do it in the conference area," says Fitzgibbons.

Message Section 4 of the Gamers' Forum is dedicated to the pursuit of online chess playing and to the discussion and support of CompuServe's *Interactive Chess* game. "Sometimes chess players meet in the conference area and then go into 'talk,' where they play chess in the forum. Sometimes, when they don't have time for a game in the forum or in *Interactive Chess*, they send messages to each other on the message board and a game can take place over days or week," Fitzgibbons notes. This also is the place where chess tournaments are organized. Data Library 4 contains PLAYRS.LST, a textfile updated regularly that contains information about forum members who like to play online chess.

One of the most popular games on the Gamers' Forum is *Diplomacy* which, according to Fitzgibbons, actually is a board game by Avalon Hill that has been adapted by Gamers' Forum members for online playing. *Diplomacy* is for seven players and the object is to carve up a map of pre-World War I Europe. Each diplomacy game is played on the forum's message board and can last up to six months. "It takes a definite commitment to play *Diplomacy*," says Fitzgibbons. "But we have lots of players willing to make that commitment."

There is so much going on with games on CompuServe, that the gamers have their own online magazine. *The Electronic Gamer* features news of CompuServe's gamers and games, written by the people who play the games. There are hints and walk-throughs of computerdom's most popular games.

If you're stuck playing *Zork* and don't know how to get out of a cyclops' lair without dying, hints and walk-throughs in *The Electronic Gamer* can help. You'll find Fitzgibbons' reviews of the latest computer games in the online magazine's review section.

Regular columns about the latest happenings on *MegaWars I*, *MegaWars III*, *SeaWAR* and the *Island of Kesmai* are available, as are quarterly newsletters from INFOCOM Software, one of America's preeminent computer game companies.

"CompuServe promises some exciting new online games in the near future," says Fitzgibbons "Some of them no doubt will attract even more newcomers to the games area. But the beauty of CompuServe's ability to offer interaction among its users is that people can dream up their own games and play them on our forum message board or in conference if they like. We're always open to suggestions and ideas."

So you want to be a CompuServe gamer and you don't know where to start? The options are endless—limited only by your imagination.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

How to Find Games on CompuServe

CompuServe has a variety of games ranging from educational to adventure and fantasy role-playing. Use this list of Quick Reference Words to locate your favorite games—and start playing.

Adventure Games*	GO ADVENT
Air Traffic Controller	GO ATCONTROL
Astrology	GO ASTROL
Baffle Word Game	GO BAFFLE
Biorhythms	GO BIORHYTHMS
BlackDragon	GO BLACKDRAGON
Board and Parlor Games*	GO BPGAMES
Casino	GO CASINO
Castle Telengard Game	GO CASTLE
CastleQuest	GO CQUEST
Command Decision	GO COMDEC
Commodore Arts and Games Forum	GO CBMART
Digital Football	GO ADFL
Fantasy Role-Playing Games*	GO FRPGAM
Flying Buffalo	GO BUFFALO
Football	GO FOOTBALL
Gamers' Forum	GO GAMERS
Gaming Connection*	GO GAMECO
Golf	GO GOLF
Hangman	GO HANGMAN
Interactive Chess	GO CHESS
Island of Kesmai	GO ISLAND
MegaWars I	GO MEGA1
MegaWars I Pictures	GO MW1PIC
MegaWars III	GO MEGAIII
Multi-Player Games*	GO MULTIG
Multi-Player Games Forum	GO MPGAMES
New Adventure	GO NEWADVENT
Original Adventure	GO ORADVENT
ShowbizQuiz	GO SHOWBIZ
Stage II	GO STAGEII
Science Trivia Quiz	GO SCITRIVIA
Scott Adams' Games	GO ADAMS
SeaWAR	GO SEAWAR
Simulation/Sports Games*	GO SSGAMES
SpaceWAR	GO SPACEWAR
The Electronic Gamer	GO EGAMER
The Multiple Choice	GO TMC
Traveler's Challenge	GO ETC-81
Trivia/Thought Games*	GO TTGAME
War Games*	GO WARGAM
Word Scramble	GO SCRAMBLE
You Guessed It!	GO YGI

*Denotes a Games menu page

VISIT OUR OPEN HOUSE AND WIN A $1,000 SHOPPING SPREE!

As a CompuServe subscriber, you are invited to join the fun and excitement of Comp-u-store OnLine's Open House. Shop with Comp-u-store OnLine, the nation's largest electronic shopping service, and register to win special prizes. During our Open House, there are no membership fees or connect time charges as you browse through our database of 250,000 name-brand items. And if you choose to purchase, you'll save up to 50% off the manufacturer's suggested list price. And that's not all! Enter the Open House Drawing and you will become eligible to win valuable prizes.

We'll award a $1,000 shopping spree to our lucky Grand Prize Winner, plus many other prizes. When you visit our Open House by logging onto Comp-u-store OnLine, enter the Open House Drawing to become eligible to win. *Join us for this special celebration . . . you have nothing to lose and lots to win.*

A Personal Invitation
To CompuServe Subscribers
For An Open House
June 28, 1987
Midnight to Midnight
On Your Personal Computer (GO CUS)

FREE CONNECT TIME

$1,000 Grand Prize • Other Valuable Prizes

Log Onto Comp-u-store OnLine For Further Details

compustore® On Line

GO OLI or circle 10 on the Reader Service Form.

ONLSA41

Greg Miller

Interactivity draws players: *Hoffman*

Making online friends in *YGI!*: *Zacks*

Ready to Take a Chance

Subscribers Compete Online for Fun, Prizes

Contests on CompuServe are more than fun and games. They offer contestants chances to win fame and fortune. With Lady Luck at their side, nearly a dozen people won free ski vacations after they participated in a grueling three-month long challenge against several hundred competitors in the Ski America Contest.

In addition to prizes, players can earn a spot in the Halls of Fame maintained by the forum operators. Winners are noted with their high scores in the game-related forums. And computer artists can see their work "hung" in an electronic gallery in the data library of the Picture Support Forum (GO PICS).

Contests can take many forms. Trivia games, chess tournaments and electronic adventures are among the favorites. For those with special interests, such as programming, opportunities exist to create new applications and receive prizes.

CompuServe games players have competed in tournaments with each other in *SeaWAR* and *Black Dragon* games. The winners of each tournament received connect time and T-shirts produced for each game.

More traditional games also attract large fields of contestants. For example, 200 people participated in an online chess tournament in the Gamers' Forum. Players left their moves on the forum's message board or played matches in the forum's conference area. In honor of National Chess Day on Oct. 4, 1986, the forum sponsored an interactive chess match during which the Florida state chess champion played 10 matches simultaneously against 10 opponents. The game lasted eight hours in the conference mode before one contestant forced the champ to resign.

Trivia and hobbies aren't the only ways to win prizes. Borland International (GO BORLAND), publishers of Turbo Pascal, Sidekick and other programs, is sponsoring a competition for people who write the best applications programs in Turbo Pascal for the Macintosh. Winners will receive an Apple LaserWriter, a Macintosh Plus or a trip for two to Hawaii after the contest ends August 1, 1987.

The Artificial Intelligence Forum (GO AIE100) recently sponsored a skill-based contest about famous people, places and events in the history of artificial intelligence. Winners received expert systems valued from $95 to $995.

People who dream of making a killing on Wall Street can play a game in The Investors' Forum (GO INVFORUM). Each player is given a hypothetical stake of money and is asked to make "investments" to increase the value of his or her portfolio. Each contest lasts about two months and prizes of CompuServe connect time are awarded to winners. The winner of the first contest, Paul R. Tautvaisas, made a victory statement, which was posted in a data library. After explaining how he researched his strategy, Tautvaisas wrote, "I'm not going to spill everything, you know. There's another contest with revised rules and I hope to win again."

Why do people enter online contests? "The most successful contests seem to be dependent on the value of the prize and the degree of the challenge," says Barbara Hoffman, CompuServe product marketing specialist for online promotions. "A high degree of challenge and a low-value prize won't draw many contestants. Time credit prizes are popular. In addition, interactivity in an online game or trivia quiz seems to draw participants."

However, winning gifts isn't the only reward. For many players, the biggest prize is meeting new people and making new friends. "People make friends and have a good time. It doesn't matter if you win or lose," says Mary F. Zacks, product manager for *You Guessed It!*, which has several methods for people to meet new friends. Players meet in the lobby, where they form teams with their old friends or meet new people. "The older players are very friendly. They'll see someone new and say 'I'll show you how to play,'" says Zacks. After the game is over, players can meet in the lounge. "They can congratulate one another. There also are tables where people can talk privately."

Contests are not offered at regular intervals, so it can be a challenge to find the latest competition. There are several ways to find out about upcoming games and contests. Check What's New (GO NEW). These news announcements usually scroll onto the screen when you sign on each week. Also, check CompuServe Community News (GO OLT-80) and individual forums, such as the Gamers' Forum (GO GAMERS) and the Multi-Player Games Forum (GO MPGAMES). Browsing through different forums is another good way to find games such as the aviation trivia game in the Aviation Forum (GO AVSIG).

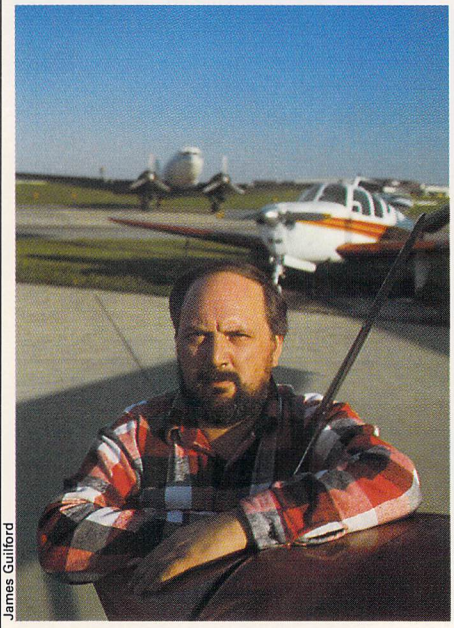
—Daniel Janal

Preparing for Takeoff

Aviation Forum Members Plan 'Fly-ins'

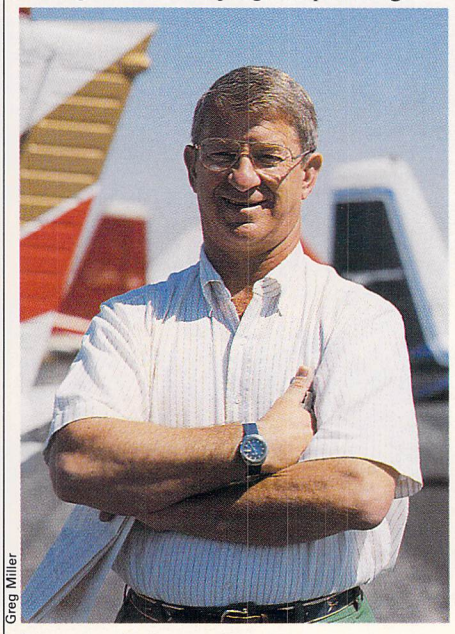
A flight of fancy will soon become reality. CompuServe Aviation Forum members will meet face-to-face during a fly-in to Don Scott Field in Columbus, Ohio, on Saturday, June 6. For some Aviation Forum (GO AVSIG) members, it will be the first chance to meet long-time online friends in person.

The fly-in is expected to attract approximately 40 forum members from such diverse points as California, Texas, Florida, Illinois and New York. Some will fly their own planes; others will arrive in rented planes or travel as passengers with friends.



James Guilford

Combining computers and the sky: *Kaputa*



Greg Miller

Directing flights to Columbus: *Galipault*

"AVSIGers are a social bunch sharing common bonds—an interest in computers and a love of the sky," explains Bob Kaputa, forum member and coordinator of the event. "We range from airline captains, freighter pilots, corporate pilots, private and student pilots to those who hang around airports because they love airplanes," he adds.

The initial idea for the get-together is rooted in the mobility of Aviation Forum members. "We have arranged a day-and-a-half activity," says John Galipault, forum administrator for the Aviation Forum, who also is coordinating the fly-in.

The primary goal of the fly-in is to get people together. "'That's part of the purpose—to try to put a face with a name," Galipault says.

Another fly-in attraction will be a trip to the Air Force Museum at Wright-Patterson Air Force Base in Dayton. "It is an incredible museum for people in the aviation field," Galipault says.

Details of the event have been carefully coordinated in advance so the fly-in will run smoothly. Many forum members volunteered to help with details, such as hotel and transportation arrangements and program planning.

"On the day of the fly-in the actual movement of the group should be a piece of cake," Kaputa said. Participants will arrive at Don Scott Field in Columbus by noon on Saturday, June 6. After lunch in Columbus, they will take vans to the Air Force Museum.

The group will return to Columbus in time for dinner. After dinner, several speakers will make short presentations. Forum member John Frank, president of the Cessna Pilots Association in Wichita, Kan., will discuss common problems with Cessnas. Bob Lilley, Ph.D., from the Ohio University avionics lab, will discuss advances in avionics and satellite navigation. Galipault will talk about the Aviation Safety Institute.

On Sunday morning, forum members will meet for breakfast and a tour of CompuServe. At noon, the group will rally to launch forum member Ross Russo, an Air Force F-16 instructor pilot, on a trans-Atlantic flight. Russo's three-day flight to Paris will include stops in Canada, Greenland, Iceland and England.

Finally, other group members will take off for their destinations.

This year's fly-in will build on the success of a similar event held last year at which about 20 forum members toured the control tower and radar room at Chicago's O'Hare Airport. During last year's fly-in, 13 AVSIG planes landed consecutively at O'Hare. Although small aircraft are the exception rather than the rule at O'Hare, the landings were arranged by an AVSIG member who works in the control tower there. Many second-time participants also are expected to renew their acquaintances, while enjoying some high-flying fun.

—Kathy Baird

Changing Your Password

The CompuServe Information Service urges its customers to change their passwords at least once a month.

The password should be a minimum of eight characters composed of two unrelated words separated by a symbol, for example: HOUSE*MAGNET.

To find out how to change your password, type GO PASSWORD.

Could *Your* Business be Affected by Happenings in the Computer World Today?

Find out in *Online Today Electronic Edition*. GO OLT-90 from any prompt on the CompuServe Information Service to get daily-updated computer news.

ONLINE TODAY

Tom Hogan

Child's Play:

Toys, Games and Hobbies

At The Electronic Mall there are many merchants offering merchandise especially for kids. Shoppers are invited to visit these three Mall stores for a selection of toys, games, hobbies and more.

Hobby Center Toys

Hobby Center Toys offers gift items for boys and girls of all ages. For younger children, there are dolls and stuffed animals. Gift ideas for older kids include the Charlie McCarthy Ventriloquist Doll and the Super Magic Kit. Those looking for an educational gift can select from three Power Tech science kits: electrics, physics and solar energy.

At their Mall store, Hobby Center Toys also offers a wide selection of model railroads and model-building kits. Featured train lines include the Lionel Nickle Plate Train Set and the Market Beginner Train Set Z-Scale. Model train hobbyists also have the opportunity to order complete print catalogs from LGB and Marklin online.

Kit builders will find kits including a Cutty Sark Clipper Wooden Ship, a 1957 Chevy Coupe and the NASA Space Shuttle 1/72 Scale. Recommended for kids who want to know how things work, is the Visible V-8 Engine Model Kit. It is more than one-quarter scale and features more than 100 moving parts. To shop Hobby Center Toys, GO HC.

TSR Hobby Shop

Game fanatics of all ages will find fun and diversion at TSR Hobby Shop. Hundreds of games, including a full selection of *Dungeons and Dragons* merchandise, are offered online. Choose from science fiction and fantasy games, war games, role-playing games and family-oriented games.

In addition to carrying a full range of TSR games, TSR's Mall store offers many games from other manufacturers including EON, FASA, Flying Buffalo and Avalon Hill. These are a few of the games found online at the TSR Hobby Shop: *Marvel Super Heroes Game, Cosmic Encounter, Across Suez Game, Car Wars, Dr. Ruth's Game of Good Sex, Dr. Who Role-Playing Game, Tales of the Arabian Knights, Bug-Eyed Monster from Outer Space* and *Yellow Clearance Black Box Blues*.

Also featured at TSR's Mall store are books and magazines including

D&D Cartoon Show Books, Endless Quest books and the Grey Hawk adventure novels. Especially recommended for game addicts is *The Game Buyers Price Guide*, an annotated listing of more than 2,000 games and game-related products.

At TSR Hobby Shop you'll discover the latest in adventure games and accessories. To shop at TSR's Mall store, GO TSR.

Tooth Fairyland

Discover Tooth Fairyland, an Electronic Mall exclusive. Now young CompuServe users can talk to the Tooth Fairy online when that first tooth begins to wobble. Children are invited to leave their messages via EasyPlex. The Tooth Fairy will respond to each child personally. Tooth Fairyland offers a selection of first tooth loss memorabilia including T-shirts and certificates.

To talk to the Tooth Fairy, or to order first tooth loss items, visit Tooth Fairyland by typing GO TF.

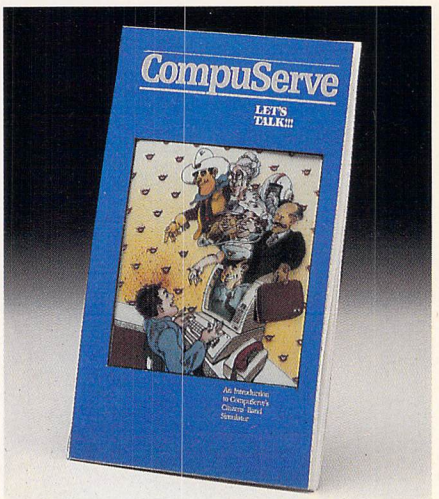
CompuServe CB Seminar Upcoming

CompuServe is sponsoring the fourth annual CB Seminar and Party on Friday and Saturday, July 10 and 11, at the Hyatt on Capitol Square in Columbus, Ohio.

The seminar features a CompuServe video, panel discussions with CompuServe product marketing managers, digitizing of CBers for online CB pictures and a guided tour of CompuServe's facilities.

Entertainment includes a cash bar Friday, July 10, at 9 p.m. EDT and a prime rib dinner with dancing to the music of Phil Dirt and the Dozers on Saturday, July 11. Door prizes include a NEC Multispeed laptop computer with MS-DOS 3.2 (grand prize) and CB Club memberships. Tickets are $60 per person.

For more details, type GO CUP at any CompuServe Information Service prompt.



Let's Talk:
An Introduction To CompuServe's Citizen's Band Simulator
Although you can teach yourself to *access* CB in a single session, you won't have any idea about the real capacity of CB as a communications utility and modern day party line until you read this primer for computer conversation.

$4.95

APPAREL/ACCESSORIES

APC	Apparel Concepts for Men
IO	Inside * Outside
LH	L'eggs/Hanes Outlet
MJ	Milkins Jewelers

AUTO

AV	AutoVision
BU	Buick Magazine
CHV	Chevy Showroom
DU	Dutchess CompuLease
FMC	Ford Motor Co.

BOOKS/PERIODICALS

BAL	Ballantine Books
DJ	Dow Jones & Co.
MH	The McGraw-Hill Book Co.
MER	Mercury House
BK	Small Computer Book Club
WB	Waldenbooks

COMPUTING

ATN	Aaxion Tech Network
CE	Computer Express
HTH	The Heath Co.
IBM	IBM Canada Ltd.
IR	Icon Review
IS	Investment Software
MM	Marymac Industries Inc.
MNU	Menu International
SAF	Safeware
SR	Sears, Roebuck and Co.
SDA	Software Discounters of America
WOC	CDA World of Computers

FINANCIAL

BNB	Beneficial National Bank USA
BSW	Bowers, Schumann & Welch
INC	Business Incorporating Guide
CN	Colonial National Bank USA
DWR	Dean Witter Reynolds
EL	Equitable Life
FT	First Texas Savings
HRB	H&R Block
MU	Max Ule Discount Brokerage

GIFTS/NOVELTIES

AK	Alaska Teleshopper
EX	Executive Engravers
HI	Hawaiian Isle
LM	Lincoln Manor Baskets
TF	Tooth Fairyland

GOURMET/FLOWERS

COF	Coffee Emporium
FTH	Fifth Avenue Shopper
FFS	Florida Fruit Shippers
SIM	Simon David
WK	Walter Knoll Florist

HEALTH/BEAUTY

BS	B&K Beauty Supplies
MN	Merle Norman Cosmetics

HOBBIES/TOYS

HC	Hobby Center Toys
TSR	TSR Hobby Shop

HOME/APPLIANCES

BD	Black & Decker Powerline Network
NH	New England Habitats
VC	Vacuum Advance

MERCHANDISE/ELECTRONICS

ATT	AT&T
ORD	CompuServe Store
CFD	Crutchfield
GC	Garden Camera & Electronics
SR	Sears, Roebuck and Co.
SUN	Sunland Camera
SV	Stereo/Video Factory

MUSIC/MOVIES

EMC	Express Music
MV	Magic Castle Video
MAO	Music Alley Online
RC	RCA Direct Marketing

OFFICE SUPPLIES

GL	Great Lakes Business Forms
OM	Office Machines & Supplies

ONLINE SERVICES

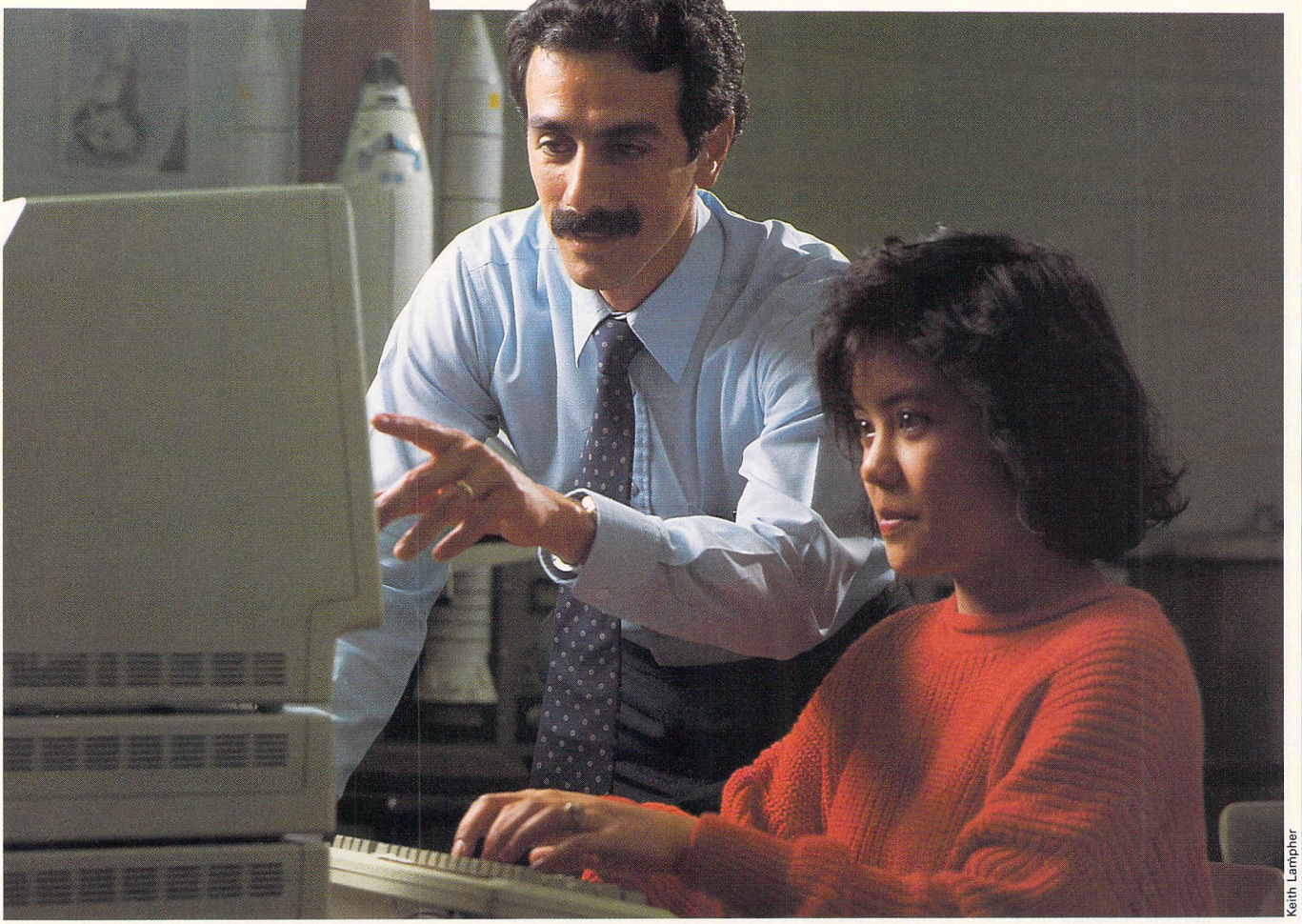
EF	EF Hutton
NN	NewsNet
OA	Official Airline Guides Inc.
VL	Videolog

PREMIUM MERCHANTS

AXM	American Express Merchandise
BL	Bloomingdale's By Mail
NM	Neiman-Marcus
BAG	Woodstock Leather Co.

SPORTS/LEISURE

AF	Air France
AT	Ameropa Travel
BB	Bike Barn
HF	Carolina Health & Fitness
RR	Rin Robyn Pool 'N Patio



Keith Lamphier

Readying an experimental space capsule: *Fortunato and students form their own 'mission control'*

Students Launch Space Project

Fortunato, De Loach Take Young Space Research Team Online

Go back three or four years to when it all began, and odds are that even NASA had no idea what its seminal idea would become or that CompuServe Forum Administrator Dick DeLoach would be involved in the project.

It was simple in the beginning: offer high-school students the opportunity to design an experiment to send into space. To do this, NASA Langley sent a goodwill ambassador of sorts — an educational specialist — to schools within a 50-mile radius of the Virginia facility.

Students learned how to win the right to fill a "Get Away Special"—a 5-foot-3-inch capsule with the capacity for a 200 pound, self-powered apparatus.

"When we got the request, we turned the kids into a proposal research team," explains Ron Fortunato, teacher of gifted and talented students in the Norfolk public school system. His students, who authored the winning proposal, came from an after-school physical science program. "We took a couple of months to develop our ideas, then submitted three proposals. Two were accepted," he says.

The first experiment they pursued is designed to test materials in space using an acoustics method. Based on a well-understood earthbound technique, Fortunato's students planned ways to transfer the method to a zero-gravity environment.

Fortunato was a good choice to head a project like this. Besides being a dedicated teacher, he also was one of the two Virginia finalists for the Teacher in Space program.Fortunato also knew NASA's way of doing things. "We put together a space flight organization, just like NASA does, with an operations manager, project engineer and managers for key systems, such as mechanical, electrical, safety, quality assurance and thermal control," he says.

"NASA was anxious to help students in these career areas," he says. Like their NASA counterparts, the students had to work on the various aspects of the experiment, research the apparatus and present weekly status reports.

Dubbed NORSTAR (Norfolk Public Schools Student Team for Acoustical Research), the program took roots at the Norfolk Technical Vocational Center, where the school district established a laboratory for the project.

Fortunato's group subsequently got the nod to go ahead with a second

experiment in robotics. And a third direction has materialized. Dubbed SEER (Space Station Environmental Expert Research system), this concept grew out of the Space Sciences Academy summer program at Stanford University, where Fortunato taught. There the students began to develop an artificial intelligence expert system to run the environment and experiments in a research module in space. When the students presented their ideas to Dr. David Black, NASA chief scientist, they found out that "they had picked exactly the system on the proposed space station." Black agreed to be a consultant for the SEER Project that Fortunato would take back to his student-run NORSTAR center.

How NORSTAR and SEER linked up with CompuServe isn't too surprising. Dick DeLoach, a research scientist for NASA Langley, became a mentor, working with the student telecommunications manager for the NORSTAR team. DeLoach also is the administrator of CompuServe's Space, Space Education and Astronomy forums. When it became obvious that NORSTAR and especially SEER might benefit from interaction with CompuServe subscribers, teachers and other students, plans were made for a Space and Astronomy display area on CompuServe (GO ASTRONOMY or GO SPACE).

The Space/Space Ed Special Feature option brings up a submenu containing NORSTAR choices. For those interested in the students' progress, the NORSTAR area includes news and updates, plus "notebook" entries—status reports from each student management position. As students develop the process skills to handle a space experiment design, they will be able to share the experience with the electronic community.

Ultimately, NORSTAR should involve teachers who want to implement space topics, students who want to discuss activities and professionals who can act as consultants. Watch *Online Today Electronic Edition* for announcements of online conferences.

The SEER activities, another submenu option, will be even more interactive for CompuServe subscriber input. Here, students and teachers can participate online with the project. Students and teachers from the United States, Japan, Europe and Canada will be encouraged to participate. Files will be exchanged online, and weekly status reviews in the conference area will include teachers, browsers or conference drop-ins who want to add their comments or suggestions.

DeLoach says that other special features within the Space Education Forum will include advances in space education news, an archive of space-related lesson plans, and a lesson plan menu with the option for all grade level groupings in such subjects as physical science and life science. In addition, such support materials as reference lists and suggested films will be available. "Dick Methia (one of the Teacher in Space finalists) will do a feature, 'Space Pioneers in the Classroom', which will discuss teachers in unusual programs. We will describe the program and how to contact the teacher," says DeLoach. "This will put teachers in touch with each other."

Items in the Space display area include current events in space, space spin-offs — weekly updates on technology transfer — and an online editorial page, where well-known guests will be invited to write columns on technology issues or resource priorities.

The Astronomy display area will contain current events, a weekly update from *Sky and Telescope* magazine, targets of interest in Sky at a Glance, the worldwide planetarium, with lots of subfeature options, online archives of amateur sightings and the Yale Bright Star Catalog.

Additional features should include space education center courses and information exchanges from the Challenger Center for Space Education, founded by astronaut widow June Scobey, and more from the Space Sciences Academy at Stanford University. These two organizations have access to CompuServe, and DeLoach says ways to integrate the computer network into their efforts are being explored.

This spring, some of the original NORSTAR project team members will graduate from high school, but underclass representatives from all grades are now on the team to maintain its continuity. Each week, NORSTAR alumni can access a briefing file to keep them up to date.

As for the progress report of the original acoustic experiment, "We will fly in '88," Fortunato says confidently. "And when they do, the dreams and hard work of the NORSTAR students will be among about a dozen similar experiments that are being readied for the restart of shuttle flights.

—Yvonne H. Burry

INVEST BY COMPUTER

Central Asset Account National Network FREE On-Line Access

Harness your computer's power with UNI$AVE

- **Deep Discount Brokerage Rates**
- **Money Market Sweep Account**
- **Unlimited Check Writing**
- **Portfolio Accounting**
- **Open with only $1,000**

Many FREE Computer Services
FREE Access to View Account
FREE Access to View Positions
FREE Entry of Brokerage Orders
NO Application Fee
NO Minimum Monthly Charge
NO Software Purchase Required
On-Line Investment Research

Data for over 40,000 securities
Quotes - Stock Performance Ratings
Research Fees based on connect time

Discount Stock Commissions

Up to 240 Shares	$30.00
241 to 799 Shares	12½¢ per sh
800 to 1099 Shares	10 ¢ per sh
1100 to 2099 Shares	8 ¢ per sh
2100 to 3099 Shares	7 ¢ per sh
3100 Shares or More	5 ¢ per sh

Call 1-800-UMC-SAVE

Unified Management Corporation

Guaranty Building • Indianapolis IN 46204

MEMBER Midwest Stock Exchange NASD SIPC

GO OLI or circle 11 on the Reader Service Form.

What's Going On?

If you want to know what's going on around CompuServe, check into *Online Today Electronic Edition*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT-50 from any prompt on the CompuServe Information Service.

ONLINE TODAY

NEW PRODUCTS

Euro Merger Expands WWX

The Worldwide Exchange has added a European section of exchanges and rentals listing many properties in England, France and other European countries.

CompuServe subscribers may select vacation homes, villas, condominiums, cottages, apartments and bed-and-breakfast accommodations available for rent, sale or exchange in the United States.

The additional listings are largely a result of the recent directory collaboration between Worldwide Exchange and agencies in England, France and Scotland. GO WWX

Kesmai Poster Available Online

A poster commemorating the *Island of Kesmai* game is available for $3.95 via CompuServe's online ordering service.

The poster is a four-color, 11-by 17-inch rendition of an adventurer who encounters one of the island's unfriendly creatures. GO ORDER

Rare Disease Database Expands

The NORD Services/Rare Disease Database has added more than 70 disease articles including Toxoplasmosis, Measles, Diabetes Insipidus, Stiff Man Syndrome, Porphyrias, Mucolipidoses and Mucopolysaccharidoses.

NORD encourages parents to reread the Reye Syndrome entry. New information about causes and therapies has been added to many existing entries. Also a genetic counseling service has been added to several articles. GO NORD

WordStar 4.0 Info Online

Information about WordStar 4.0, an updated version of the most widely used microcomputer word processing software, is available to CompuServe subscribers in the MicroPro Forum.

WordStar Professional Release 4.0 offers more than 125 enhancements of the last version. The forum's data libraries have information on the new features of the latest release. GO MICROPRO

Antic Online Redesigned

Antic Online has been redesigned to offer more hardware and software reviews and feature articles and to provide Atari computer users with more updated information.

The magazine also includes an RLE graphics section to allow a display of screen pictures without downloading, and the Software Shelf, which allows downloading of *Antic* software listings from the current magazine edition. GO ANTIC

VIDTEX Info Added to Q&A Library

Customer Service's Online Question and Answer service has expanded to include information about VIDTEX, CompuServe's communications software.

VIDTEX features, compatible machines, common questions and ordering information are among topics covered.

The Online Question and Answer service now has 11 topics online including uploading and downloading of CompuServe files and graphics. New topics are being added regularly to meet subscribers' needs. GO OQA

Gift of Time

Online Today offers subscribers the chance to write a 200-word essay on how they use CompuServe's Information Service.

Your essay should be typed double-spaced. Send it to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

If we use your column, you will receive 10 hours of standard service connect time (a $60 value) and a byline.

Subscriber Finds Adventures Online

The popularity of "Adventure" games is not dead and CompuServe is the best adventure of all. Who says that CompuServe must be used merely as a database for particular interests or job-related issues? Why not participate for its adventure?

I've found it exciting to use CompuServe as both a computing and information adventure, where each menu awakens my curiosity to investigate. I can explore the information available, download special pieces for later review and at the same time learn about the power of telecommunications at my fingertips.

Almost always, being online leaves me delighted, enlightened and awed by the challenge to explore further. CompuServe is "the geography of adventure" online. The only qualification needed for this adventure is your own curiosity to learn and to experience life.

Norman A. Evans
Greene, New York

Ask Customer Service

Q: Where can I find the latest news about the CompuServe Information Service and the computer industry online?

A: When you are online with CompuServe, you can review the latest news about CompuServe and the computer industry in *Online Today Electronic Edition*.

The electronic edition provides daily updated computer and information industry news, product announcements, CompuServe news and reviews of new hardware, software and books. Type GO OLT.

Q: Where can I get online assistance for questions pertaining to my computer hardware and software?

A: One valuable online information source for hardware and software questions is the computer forums area. The hardware and software forums can assist in providing answers for technical questions including uploading and downloading tips. They also keep you abreast of the latest additions in equipment as it relates to your specific computer. Type GO FORUMS to get a complete listing.

Q: How can I receive immediate assistance with navigating CompuServe efficiently?

A: Understanding how to navigate within CompuServe in a timely, efficient way is as easy as typing the word HELP or entering a ? at any CompuServe prompt. Using the Help command can provide assistance on how to make your keyboard more "user-friendly." You will see a listing of keyboard letters and their corresponding functions. Also, you will receive a list of control character commands.

Q: Is there an area online that will allow me to update, change and review my billing information?

A: Just type GO BILLING. The billing database allows you to perform the following functions:

Review your charges
Have your billing options explained
Change your billing address
Change/Renew your billing option and information
Order the Executive Option
Review general billing information.

Q: Where can I receive online information about users guides? How I can place an order for those guides?

A: CompuServe publishes several guides designed to assist you in getting the most out of your information service. To review and place orders online, type GO ORDER.

Q: I'm aware of the connect-time rates, but where can I get online information listing surcharged services and the fees associated with their use?

A: You can retrieve up-to-date rate information, communication surcharges, and a listing of premium programs by typing GO RATES.

Q: I'm new to telecomputing and the information available is overwhelming. When I am online, is there a quick way to find a topic without having to navigate through menus?

A: You can find a topic quickly and easily by typing the word FIND followed by a keyword at any prompt, for example, FIND NEWS, for example, will get a listing of NEWS databases and a corresponding GO command to take you there.

—Ken Johnston and John Muehlheim

These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File area, setting up a Personal Menu and more. Type GO QUESTIONS at any prompt on the CompuServe Information Service.

★ Ultra-low brokerage commissions.
★ NO start-up charges.
★ NO monthly subscription charges.

TRIPLE SAVINGS

...when you go "on line" with Quick & Reilly, America's largest independent discount broker

With Quick & Reilly's easy-to-use QUICK WAY on-line brokerage service...

- You can have from one to 75 trading accounts with NO start-up or monthly subscription charges.
- You also get big savings on commissions.

COMPARE	100 sh @ 40	300 sh @ 30	1000 sh @ 20
QUICK & REILLY	$41	$ 75	$ 98
Charles Schwab & Co	49	89	122
Merrill Lynch	86	193	357
E.F. Hutton	84	180	399
Dean Witter Reynolds	72	180	360

(Telephone Survey 6/86)

- You can get quotes on any stock, option or market index listed in the Wall Street Journal.
- You can place orders in minutes, day or night. Reports are sent back on-line, followed by written confirmations.
- You can monitor, on a single screen, the prices of up to 18 stocks. (You can similarly monitor options.)
- Through CompuServe, you have instant access to Standard & Poor's Reports, Value Line Data Base II, and 10 years of market data on some 50,000 securities.
- And, any time you wish, you can bypass your computer and get *personal service* from an individual Account Executive.

For complete information plus an on-line demonstration and application for QUICK WAY—type GO QWK. Or call us toll free at 800-672-7220.

Quick & Reilly, Inc.
Members NYSE, SIPC
120 Wall Street, New York, NY 10005

GO OLI or circle 12 on the Reader Service Form.

New Forum Files Aid Computing

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in *Online Today Electronic Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added twice monthly.

AMIGA FORUM
(GO AMIGAFORUM)

New Machines—The official announcement of the Amiga A500 and the A2000. File NEWAMI.TXT in Data Library 3.

Get the Ogre—A tactical ground combat game against a robot tank. File OGRE.ARC in Data Library 7.

Spelling Checker—A second generation checker for the Amiga by Mike Berro. File ASPELL.ARC in Data Library 8.

ATARI 8-BIT FORUM
(GO ATARI8)

Card Game—An implementation of the popular card game of Euchre. File EUCHRE.BAS in Data Library 1.

AUTO RACING FORUM
(GO RACING)

World Tracks—A list of Formula One World Championship Grand Prix tracks listed alphabetically by country including track name, length, approximate location, mailing address, telephone number and Telex number when available. File TRACKS.CAT in Data Library 11.

BORLAND LANGUAGES FORUM
(GO BORPRO)

TSR Program—Version 2.2 of TSR, a set of programs to manage DOS memory allocation and terminate-and-stay-resident programs. MAPMEM shows all allocated memory blocks. MARK and RELEASE can remove popups from memory in batch mode. EATMEM eats memory for program testing. WATCH keeps a detailed record of all TSRs installed. Files TSRCOM.ARC and TSRSRC.ARC (with Turbo Pascal source code) in Data Library 4.

COMMODORE ART/GAMES FORUM
(GO CBMART)

Author's Conference—The edited transcript of a formal conference with Orson Scott Card, science fiction writer and winner of both the Hugo and Nebula awards. His novels include *Ender's Game, A Planet Called Treason* and *Songmaster.* File SCOTTC.CNF in Data Library 1.

Modem Chess—A chess game that will allow two people with modems to play the game over the phone. Players make moves with the joystick and a dual chat mode keeps them in contact. Custom multi-color characters included. File CHESST.IMG in Data Library 11.

EPSON FORUM
(GO EPSON)

Spreadsheet Printer—A public domain program that allows 90-degree rotation of printed spreadsheets. File PDSW.LBR in Data Library 4.

IBM SOFTWARE FORUM
(GO IBMSW)

Form Drawing Program—Version 2.64 of this form and screen drawing system that lets you create and print neat line drawings and forms. Features a full-screen editor and graphics print capability. Supports all display types, PCs, ATs and compatibles. Superior line drawing with Epson and IBM printers. File FORM.ARC in Data Library 6.

IBM NEW USERS FORUM
(GO IBMNEW)

Statkeeper—A Baseball Statkeeper that will keep complete batting statistics for up to 100 players on 12 teams. Sorts on a variety of stats and reports to screen or printer. File BASEBL.ARC in Data Library 6.

INVESTORS' FORUM
(GO INVFORUM)

How to Get Credit—A textfile, written by a credit manager, explaining a detailed way to establish a good credit rating with lending institutions even if you're starting with a small sum of money. File CREDIT.TXT in Data Library 10.

Security Analysis—Three routines frequently used in technical analysis of securities, MACD, MATRIP and RSCALC. Uses prices in a format available on CompuServe. File MACDRS.ARC in Data Library 1.

JAVELIN SOFTWARE FORUM
(GO JAVELIN)

Rat Race—An example of a rat race macro game created by Javelin Software engineers Arye Gittleman and Peter "Blue" Pathe. File RATRAC.ARC in Data Library 5.

MAUG™ APPLE 2/III FORUM
(GO APPLE)

Check Keeper—A series of BASIC programs and a textfile that lets you write checks, keep your check register, print regular checks instead of expensive tractor-fed checks and justify your check register. Files BK.1, BK.2, BK.3, BK.STR and BK.DOC in Data Library 1.

Adventure Game—A graphic/text adventure done in Lightspeed C. File SCARAB in Data Library 7.

MAUG™ MACBIZ FORUM
(GO MACBIZ)

Spreadsheet—A block-oriented, free form spreadsheet program that allows you to use any combination of fonts, styles, sizes and colors. You can mix charts, pictures, calculations and text anywhere on a worksheet. From Data Tailor Inc. File TRAPEZ.BIN in Data Library 3.

TANDY PROFESSIONAL FORUM
(GO TRS80PRO)

Label Printer—A shareware label printing management program for MS-DOS machines. File LABMST.ARC in Data Library 6.

Spreadsheet—Version 8.01 of Turbo-Calc, a full-featured spreadsheet from P&M Software. For MS-DOS machines. File TC801.ARC in Data Library 6.

Account Management—Version 1.04 of Checkmate, a complete account management system featuring pull-down menus, online context-sensitive help, multiple accounts, flexible reports, check printing and more. Shareware written by Tim Bougan. File CM104.ARC in Data Library 6.

PC-WRITE—Perhaps the most famous shareware word-processing program for IBM PCs and compatibles. The latest version features mail merge, auto reformatting, justification, proportional spacing and a 50,000 word expandable spelling checker. Files PCWRTE.ARC and PCWRIT.ARC in Data Library 6. Files containing PC-WRITE can also be found in Data Library 3 of the IBM Software Forum (GO IBMSW). The files are PCW1.ARC and PCW2.ARC.

WORK FROM HOME FORUM
(GO WORK)

Business Ideas—Data Library 4, IDEAS.BIZ, more than 300 ideas and concepts for home businesses. Files IDEAS.BIZ in Data Library 4.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

CompuServe offers you the guidance you need for file downloading.

Would you completely ignore something that you knew would enhance your personal computer's capabilities? Probably not. Unfortunately, that's what too many personal computer owners do when it comes to downloading valuable program files from the data libraries on CompuServe.

To remedy this problem CompuServe has published forum software downloading guides for the **Amiga, Atari 8-Bit, IBMNET, Macintosh User** and **Tandy Model 100 Forums**. These *Best of ...* guides are a collection of the most popular files as determined by the members of each of these five forums.

File retrieval made more efficient.

The guides make downloading more efficient by providing a comprehensive tutorial and a keyword index. Also, specific information is presented about each individual file including name, size, description and location. All of this helps you access files directly once you're in the forum, reducing online search costs.

Order online by entering GO ORDER. Guides are $9.95 each plus $2.00 postage and handling. If you're not a subscriber, order by calling (800) 848-8199 or (614) 457-0802 in Ohio, Alaska or outside the United States. Please specify which guide you would like when ordering.

CompuServe®

Information Services

SUBJECT INDEX

*** Current as of June 1, 1987.**
The CompuServe Information Service Subject Index provides a list of the communication and information services available online, and it is updated continually. Refer to the most recent index of services online by entering **GO INDEX** at any prompt.

Use the most direct route to reach a service by entering **GO** followed by the Quick Reference Word provided in the index. Enter this command at any online prompt.

Find the services available under a topic of interest by entering **FIND** and the topic at any online prompt. For example, if you would like to see what services are offered concerning travel, enter FIND TRAVEL. You will receive a list of the services related to travel and the Quick Reference Words to proceed to each area.

COMPUTERS AND TECHNOLOGY	**GO COMPUTERS**
Personal Computing Forums—Hardware	
Amiga Forum	GO AMIGAFORUM
Apple Users Group	GO MAUG
Apple Developers Forum	GO APPDEV
Apple II and III Forum	GO APPLE
Apple User Groups Forum	GO APPUG
Macintosh Business Forum	GO MACBIZ
Macintosh Users Forum	GO MACUS
Atari Forums	GO ATARI
Atari 8-Bit Forum	GO ATARI8
Atari 16-Bit Forum	GO ATARI16
Atari Developers Forum	GO ATARIDEV
Commodore Users Network	GO CBMNET
Commodore Arts and Games Forum	GO CBMART
Commodore Communications Forum	GO CBMCOM
Commodore Programming Forum	GO CBMPRG
Commodore Service Forum	GO CBM-2000
DEC Users Network	GO DECUNET
DEC PC Forum	GO DECPC
PDP-11 Forum	GO PDP11
VAX Forum	GO VAXSIG
Epson Forum	GO EPSON
Heath Users Group	GO HEATHUSERS
Hewlett-Packard Series 100 Forum	GO HP
IBM Users Network	GO IBMNET
IBM Communications Forum	GO IBMCOM
IBM Hardware Forum	GO IBMHW
IBM Junior Forum	GO IBMJR
IBM New Users Forum	GO IBMNEW
IBM Software Forum	GO IBMSW
Kaypro Forum	GO KAYPRO
OS9 Operating System Forum	GO OS9
Tandy Users Network	GO TANDYNET
Color Computer Forum	GO COCO
LDOS/TRSDOS6 Forum	GO LDOS
Model 100/Portables Forum	GO M100SIG
Tandy Corporation Newsletter	GO TRS80
Tandy Professional Forum	GO TRS80PRO
Texas Instruments Forum	GO TIFORUM
Personal Computing Forums—Software/Languages	
AI EXPERT Magazine	GO AIE
Ashton-Tate Forum	GO ASHFORUM
Autodesk Forum	GO ADESK
Borland International Forum	GO BORLAND
CADRE Forum	GO CADRE
Computer Art	GO ARTSIG
Computer Club Forum	GO CLUB
Computer Consultants Forum	GO CONSULT
COMPUTER LANGUAGE Magazine	GO CLM
Computer Training Forum	GO DPTRAIN
CP/M User Group	GO CPMSIG
Digital Research Forum	GO DRFORUM
Forth Forum	GO FORTH
LOGO Forum	GO LOGOFORUM
LOTUS Forum	GO LOTUS
1-2-3 Software Forum	GO LOTUS123
Jazz Software Forum	GO LOTUSJAZZ
Symphony Software Forum	GO SYMPHONY
LDOS/TRSDOS6 Forum	GO LDOS
Living Videotext Forum	GO LVTFORUM
MicroPro Users Forum	GO MICROPRO
Microsoft Forum	GO MSOFT
Pascal Forum	GO MUSUS
Programmers Forum	GO PROGSIG
Software Publishing Forum	GO SPCFORUM
Whole Earth Software Forum	GO WHOLEEARTH
Electronic Publications and Other Interests	
ANTIC ONLINE	GO ANTIC
Apples Online	GO AOL
Digital Research Inc.	GO DRI
Dr. Dobb's Journal	GO DDJ
DR. JOB	GO DRJ
FAMILY COMPUTING Magazine Electronic Edition	GO FAM
IQuest—The Online Reference Resource	GO IQUEST
Microsearch	GO MICROS
ONLINE TODAY	GO TODAY
Personal File Area	PER
Software Publishing Online	GO SPC
Tandy Corporation Newsletter	GO TANDY
Texas Instruments News	GO TINEWS
THE ELECTRONIC GAMER™	GO EGAMER
The World of LOTUS	GO LOTUS
VIDTEX™ Communication Software	GO VIDTEX

COMMUNICATION	**GO COMMUNICATE**
CB Simulator (Computer Conferencing)	GO CB
CB Society	GO CUPCAKE
Directory of Information Service Subscribers	GO DIRECTORY
EasyPlex Electronic Mail	GO EASYPLEX
National Bulletin Board	GO BULLETIN
Communication-Related Forums	
Citizen's Band Interest Group	GO CBIG
HamNet Ham Radio Network	GO HAMNET
Telecommunications Forum	GO TELECOMM

NEWS, WEATHER, SPORTS	**GO NEWS**
AP Sports Wire	GO SPORTS
Associated Press Videotex Wire	GO APV
Computer Sports World	GO CSW
Executive News Service	GO ENS
Hollywood Hotline	GO HOLLYWOOD
IQuest—The Online Reference Resource	GO IQUEST
ONLINE TODAY Electronic Edition	GO ONLINE
Sports News	GO SPORTS
St. Louis Post-Dispatch	GO SPD
The Business Wire	GO TBW
Weather Reports, Forecasts, Maps	GO WEATHER
News and Sports Forums	
Auto Racing Forum	GO RACING
Journalism Forum	GO JFORUM
National Issues and People Forum	GO ISSUESFORUM
Online CompuServe Connection	GO COMPUSERVE
Outdoors Forum	GO OUTDOORFORUM
Sailing Forum	GO SAILING
Sports Forum	GO SPORTSFORUM

TRAVEL SERVICES	**GO TRAVEL**
Adventures in Travel	GO AIT
American Express Travel Services	GO AMEX
Discover Orlando	GO ORLANDO
Educational Travel Connection	GO EDTRAVEL
Official Airline Guide EE	GO OAG
Pan American Travel Guide	GO PANAM
Rocky Mountain Connections	GO ROCKIES
State Department Travel Briefings	GO STATE
Sun 'N Sand Vacations	GO SNS
Travelshopper	GO TWA

B J E C T I N D E X

TravelVision	GO TRV
VISA Advisors	GO VISA
West Coast Travel	GO WESTCOAST
What's New in Travel	GO WNT
WorldWide Exchange	GO WWX
Travel-Related Forums	
Florida Travel	GO FLORIDA
Travel Forum	GO TRAVSIG
Aviation Services	
Airline Flight Information	GO FLIGHTS
Aviation Forum	GO AVSIG
Aviation Safety Institute	GO ASI
Aviation Services	GO AVIATION
Flight Planning and Weather Briefings	GO EMI
Service Difficulty Reports	GO ASI
Weather Maps	GO MAPS
Weather Reports and Forecasts	GO BRIEFI

SHOPPING SERVICES	**GO SHOPPING**
Comp-u-store Online	GO CUS
CompuServe Product Ordering	GO ORDER
CompuServe SOFTEX Software Sales	GO SOFTEX
New Car Showroom	GO NEWCAR
The Electronic Mall™ (selected merchants)	GO MALL
Apparel/Accessories	
Apparel Concepts for Men	GO APC
Inside * Outside	GO IO
L'eggs/Hanes Outlet	GO LH
Milkins Jewelers	GO MJ
Woodstock Leather	GO BAG
Auto	
Chevy Showroom	GO CHV
Ford Motor Company	GO FMC
Books	
Ballantine Books	GO BAL
Mercury House	GO MER
Small Computer Book Club	GO BK
The McGraw-Hill Book Company	GO MH
Waldenbooks	GO WB
Computing	
Computer Express	GO CE
Great Lakes Business Forms	GO GL
IBM Canada Ltd.	GO IBM
Icon Review	GO IR
Investment Software	GO IS
Marymac Industries Inc.	GO MM
Menu International	GO MNU
Misco Computer Supplies	GO MO
Software Discounters of America	GO SDA
The Heath Company	GO HTH
World of Computers	GO WOC
Financial	
Beneficial National Bank	GO BNB
Business Incorporating Guide	GO INC
Colonial National Bank USA	GO CN
Dean Witter Reynolds	GO DWR
Equitable Life	GO EL
H&R Block	GO HRB
Max Ule Discount Brokerage	GO MU
Gifts/Gourmet	
Alaska Teleshopper	GO AK
Coffee Emporium	GO COF
Executive Engraver	GO EX
Fifth Avenue Shopper	GO FTH
Florida Fruit Shippers	GO FFS
Hawaiian Isle	GO HI
Lincoln Manor Baskets	GO LM
Simon David	GO SIM
Tooth FairyLand	GO TF
Walter Knoll Florist	GO WK
Health/Beauty	
Carolina Health & Fitness	GO HF
Merle Norman Cosmetics	GO MN
VitaMenagerie Discount Vitamins	GO VM
Home/Leisure	
Cosmic Concepts	GO CC
Hobby Center Toys	GO HC
Music Alley Online	GO MAO
QualiToy	GO TY
Rin Robyn Pool & Patio	GO RR
TSR Hobby Shop	GO TSR
Vacuum Advance	GO VCS
Merchandise/Electronics	
American Airlines Catalog	GO AA
AT & T	GO ATT
Crutchfield	GO CFD
Office Machines & Supplies	GO OM
Sears, Roebuck & Co.	GO SR
Sunland Camera	GO SUN
Online Services	
EF Hutton	GO EF
NewsNet	GO NN
Official Airline Guides	GO OA
Videolog	GO VL
Periodicals	
CW Communications	GO CW
Dow Jones & Co	GO DJ
EBSCO Magazine Entree	GO ME
Premium Merchants	
American Express	GO AXM
Bloomingdale's By Mail	GO BL
Neiman-Marcus	GO NM
Records/Movies	
Express Music CDs	GO EMC
Magic Castle Video	GO MV
RCA Direct Marketing	GO RC
Travel	
Air France	GO AF
Ameropa Travel	GO AT

MONEY MATTERS AND MARKETS	**GO MONEY**
Banking Services	GO BANKING
Bond Interest Payments	GO BONDS
Bond Prices & Volumes Since 1973	GO BONDS
Brokerage Services	GO BROKERAGE
Charts to Analyze Securities Performance	GO TREND
Commodity Market News & Analysis from	

SUBJECT INDEX

News-A-Tron	GO NAT
Commodity Pricing & Volume Information	GO CPRICE
Company Information from Disclosure II	GO DISCLOSURE
Company Information from Standard & Poor's	GO S&P
Diamond Information from Rappaport's Diamond Service	GO RDC
Downloading Interfaces for Company Data	GO IQINT
Downloading Interfaces for Pricing Data	GO MQINT
Earnings & Growth Estimates from the I/B/E/S	GO IBES
Earnings Estimates & Sales Projections from Value Line	GO EARNINGS
Economic Outlooks from Money Market Services	GO MMS
Financial Futures Information	GO COMMODITIES
Financial Statements from Disclosure II	GO DISCLOSURE
Financial Statements from Value Line	GO VLANN
Foreign Currency Exchange Rates Since 1973	GO QUOTES
Information USA	GO IUS
Insurance Information	GO INSURANCE
Interest Rate Outlooks from Money Market Services	GO MMS
Market & Industry Indexes Since 1973	GO QUOTES
Market and Industry Index Lookup	GO INDICATORS
MicroQuote II (Program Prompt)	GO MQUOTE
Mutual Fund Distributions	GO DIVIDENDS
Mutual Fund Services	GO FINANCE
Mutual Funds—Noload Fund Descriptions	GO NOLOAD
Mutual Funds Net Asset Values & Offered Prices	GO QUOTES
Options Prices & Volumes for Recent Contracts	GO OPRICE
Ownership Information from Disclosure/Spectrum	GO DISCLOSURE
Portfolio Valuation	GO PORT
Real Estate Appraisal	GO REAL ESTATE
Screening—Company Information from Disclosure	GO COSCREEN
Securities Symbol Lookup	GO SYMBOLS
Security Screening (on Investment Criteria)	GO SCREEN
Spreadsheet Interfaces for Securities Data	GO INTERFACES
Stock Market Highlights	GO MARKET
Stock Prices & Volumes Since 1973 (Multiple Issue)	GO QSHEET
Stock Prices & Volumes Since 1973 (Single Issue)	GO PRICES
Stock Quotes for the Current Day (Delayed 20 Minutes)	GO QQUOTE
Stock Splits & Dividends	GO DIVIDENDS
Tax & Benefit Information from the Social Security Administration	GO SSA
U.S. Dollar Outlooks from Money Market Services	GO MMS

Online Banking and Brokerage Services

Business Banking Direct from PSFS	GO BBD
Max Ule & Co. (Brokerage Services through Tickerscreen)	GO TKR
NCNB National Bank, Charlotte, N.C.	GO NCNB
PSFS, Philadelphia	GO PSFS
Quick & Reilly (Brokerage Services through Quick Way)	GO QWKWAY
Rappaport Diamond Brokers	GO RDC
Southeast Bank, Miami, Florida	GO SEB
Unified Management (Mutual Fund Services from Liquid Green)	GO UMC
United American Bank, Memphis	GO UAB

Financial and Investment Forums

Ashton-Tate Support Library	GO ASHTON
Ask Mr. Fed Forum	GO ASKFED
Financial and Investment Forums	GO FINFORUM
Investors Forum	GO INVFORUM
World of LOTUS (LOTUS 1-2-3, Symphony, Jazz)	GO LOTUS

BUSINESS MANAGEMENT AND REFERENCE — **GO BUSINESS**

American Association of Medical Systems and Informatics Communications	GO AAMSI
American College of Obstetricians and Gynecologists	GO ACOG
American Express® ADVANCE	GO AMEX
AP Videotex, Business	GO APV
Aviation and Flight Planning	GO AVIATION
Calculate Net Worth	GO FINTOL
Checkbook Balancer	GO CHECKBOOK
DR. JOB	GO DRJ
EdVENT II	GO EDVENT
Executive News Service	GO ENS
Fedwatch Newsletter	GO MMS

Independent Insurance Agents Association	GO INSURANCE
Information USA	GO IUS
Int'l Entrepreneurs' Network	GO USEN
IQuest—The Online Reference Resource	GO IQUEST
Loan Amortization	GO FINTOL
Microsearch	GO MICROS
PaperChase (MEDLINE)	GO PAPERCHASE
Rare Disease Database	GO RDB
Social Security Administration	GO SSA
Stevens Business Reports	GO SBR
SuperSite Demographic Information	GO SUPERSITE
The Business Wire	GO TBW
U.S. Government Publications	GO GPO
World-Wide Investment System	GO REAL ESTATE

Industry and Professional Forums

American Association of Medical Systems and Informatics	GO MEDSIG
Broadcast Professional Forum	GO BPFORUM
Communications Industry	GO MEDIA
Computer Consultants Forum	GO CONSULT
Consumer Electronics Forum	GO CEFORUM
Int'l. Entrepreneurs Network	GO USEN
Journalism Forum	GO JFORUM
Legal Forum	GO LAWSIG
Military Veterans Services	GO VET
Public Relations and Marketing	GO PRSIG
Safetynet Forum	GO SAFETY
Telecommunications	GO TELECOMM
Work From Home Forum	GO WORK
Writers and Editors	GO WESIG

HOME, HEALTH & FAMILY — **GO HOME**

Calculate Net Worth	GO FINTOL
Checkbook Balancer	GO CHECKBOOK
HealthNet	GO HNT
Home Management	GO HOME
Human Sexuality	GO HUMAN
Independent Insurance Agents Association	GO INSURANCE
Information USA	GO IUS
Loan Amortization	GO FINTOL
New Car Showroom	GO NEWCAR
Personality Profile	GO TMC-25
Rare Disease Database	GO RDB
Social Security Administration	GO SSA
The National Satirist	GO KCS

General Interest Forums

Aquarium & Tropical Fish	GO FISHNET
Astronomy Forum	GO ASTROFORUM
Comic Book Forum	GO COMIC
Consumer Electronics	GO CEFORUM
Disabilities Forum	GO DISABILITIES
Family Computing Forum	GO FAM
Food/Wine Forums	GO FOOD

Good Earth Forum	GO GOODEARTH
Ham Radio Forum	GO HAM
Literary Forum	GO LITFORUM
Model Aviation Forum	GO MODELNET
Music Forum	GO MUSICFORUM
National Issues and People Forum	GO ISSUESFORUM
Online CompuServe Connection	GO COMPUSERVE
Outdoors Forum	GO OUTDOORFORUM
Religion Forum	GO RELIGION
Science Fiction Forum	GO SCI-FI
Space Forum	GO SPACEFORUM
WITSIG	GO WITSIG
Work From Home	GO WORK

EDUCATION AND REFERENCE — **GO EDUCATION**

Education

College Press Service	GO CPS
Educational Products Information Exchange (EPIE)	GO EPIE
Educational Travel Connection	GO EDTRAVEL
EdVENT II	GO EDVENT
Handicapped Users' Database	GO HUD
Peterson's College Guides	GO PETERSON
Rehabilitation Database	GO REHAB
Science Trivia	GO SCITRIVIA
The College Board	GO TCB
The Multiple Choice	GO MULTIP
The Whiz Quiz	GO WHIZ
Touch-Type Tutor	GO TMC

Reference

Academic American Encyclopedia	GO ENCYCLOPEDIA
Information USA	GO IUS
IQuest—The Online Reference Resource	GO IQUEST
SuperSite Demographic Information	GO SUPERSITE
U.S. Government Publications	GO GPO

Education Forums

Assoc. for Education in Journalism and Mass Communications Forum	GO AEJMC
Assoc. for the Development of Computer-based Instructional Systems Forum	GO ADCIS
Computer Training Forum	GO DPTRAIN
Disabilities Forum	GO DISABILITIES
Educational Products Information Exchange	GO EPIEFORUM
Educational Research Forum	GO EDRESEARCH
Educators Forum	GO EDFORUM
Foreign Language Education Forum	GO FLEFO
LOGO Forum	GO LOGOFORUM
Science and Math Education Forum	GO SCIENCE
Space Forum	GO SPACEFORUM
Students' Forum	GO STUFO

ENTERTAINMENT AND GAMES — **GO GAMES**

Entertainment

Hollywood Hotline	GO HOLLYWOOD
Movie Reviewettes	GO MOVIES
RockNet	GO ROCK
Soap Opera Summaries	GO SOAPS
The National Satirist	GO KCS

Entertainment/Games Forums — **GO EGFORUMS**

CBIG (CB Interest Group)	GO CBIG
Comic Book Forum	GO COMIC
Music Forum	GO MUSICFORUM
RockNet	GO ROCK
Sci-Fi Fantasy Forum	GO SCI-FI
WitSIG	GO WITSIG

Games Forums-Information — **GO GAMECON**

The Gamers' Forum	GO GAMERS
The Gaming Connection	GO GAMECON
The Multi-Player Games Forum	GO MPGAMES

Adventure Games — **GO ADVENT**

CastleQuest	GO CQUEST
Flying Buffalo	GO BUFFALO
House of Banshi	GO BANSHI
New Adventure	GO NEWADVENT
Original Adventure	GO ORADVENT
Scott Adams Adventure Series	GO ADAMS

Board/Parlor Games — **GO BPGAMES**

Astrological Charting	GO ASTROLOGY
Baffle Word Game	GO BAFFLE
Biorhythm Charting	GO BIORHYTHM
Hangman	GO HANGMAN
The Casino	GO CASINO

Fantasy Role-Playing Games — **GO FRPGAMES**

BlackDragon	GO BLACKDRAGON
Castle Telengard	GO CASTLE
Island of Kesmai	GO ISLAND

Multi-Player Games — **GO MULTIGAMES**

Air Traffic Controller	GO ATCONTROL
Baffle Word Game	GO BAFFLE
Flying Buffalo	GO BUFFALO
Island of Kesmai	GO ISLAND
MegaWars I	GO MEGA1
MegaWars III	GO MEGA3
SeaWAR	GO SEAWAR
SpaceWAR	GO SPACEWAR
The Casino	GO CASINO
You Guessed It!	GO YGI

Simultation/Sports Games — **GO SSGAMES**

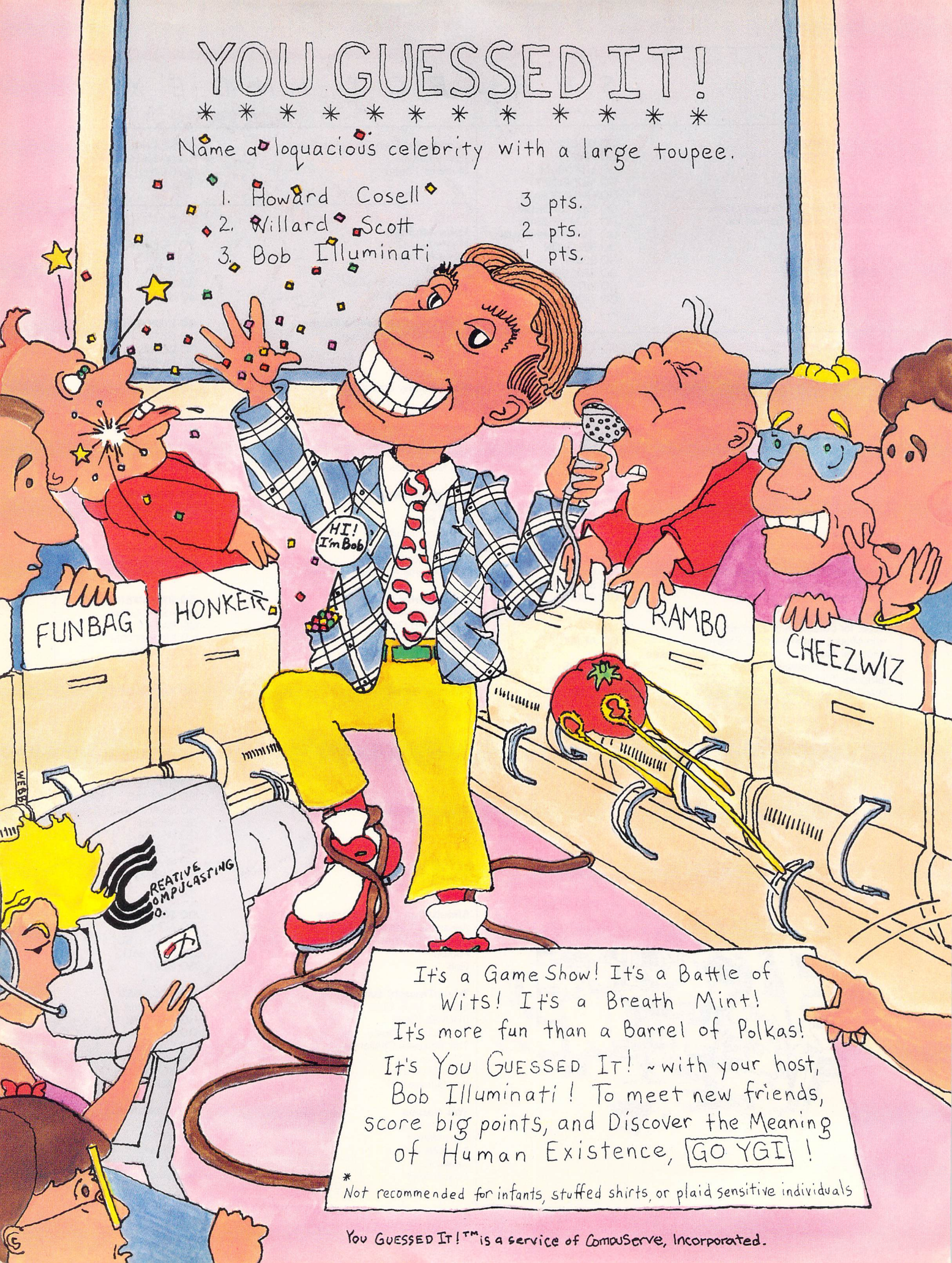
Advanced Digit Football	GO ADFL
Air Traffic Controller	GO ATCONTROL
Football	GO FOOTBALL
Golf	GO GOLF

Trivia/Thought Games — **GO TTGAMES**

Science Trivia Quiz	GO SCITRIVIA
SHOWBIZQUIZ	GO SHOWBIZ
The Multiple Choice	GO MULTIP
The Traveler's Challenge	GO ETC-81
The Whiz Quiz	GO WHIZ
Word Scramble	GO SCRAMBLE
You Guessed It!	GO YGI

War Games — **GO WARGAMES**

Command Decision	GO COMDEC
MegaWars I	GO MEGA1
MegaWars III	GO MEGA3
SeaWAR	GO SEAWAR
Space WAR	GO SPACEWAR


YOU GUESSED IT!
* * * * * * * * * * * * * *
Name a loquacious celebrity with a large toupee.
1. Howard Cosell 3 pts.
2. Willard Scott 2 pts.
3. Bob Illuminati 1 pts.
HI! I'm Bob
FUNBAG
HONKER
RAMBO
CHEEZWIZ
CREATIVE COMPUCASTING CO.
WEBB
It's a Game Show! It's a Battle of Wits! It's a Breath Mint! It's more fun than a Barrel of Polkas! It's YOU GUESSED IT! ~with your host, Bob Illuminati! To meet new friends, score big points, and Discover the Meaning of Human Existence, GO YGI !
* Not recommended for infants, stuffed shirts, or plaid sensitive individuals
YOU GUESSED IT!™ is a service of CompuServe, Incorporated.

Product Almanac Updates Keep Users Up-to-Date

Since the CompuServe Information Service is constantly changing, the following pages are provided as a supplement to the *CompuServe Product Almanac*. *Almanac* updates will appear periodically in *Online Today*.

The *CompuServe Product Almanac* is a handy reference source describing the forums and databases on the CompuServe Information Service. By checking the *Almanac*, you can navigate the service more quickly. To order a copy of the *CompuServe Product Almanac*, type GO ORDER.

3.3.2.12
AEJMC Forum **AEJMC**

The AEJMC Forum is a good source of information for journalism professionals, teachers, researchers and students. This forum is sponsored by the Association for Education in Journalism and Mass Communication. In it, journalists discuss ethics and share tips for researching stories, ideas for covering stories and job opening information.

3.3.3.3
Computer Training Forum **DPTRAIN**

The Computer Training Forum is for computer trainers, teachers, information center staffs, vendors and anyone else with an opinion on the computer learning process. Data libraries contain information on training techniques, office automation, careers and computers in education. International members contribute reports on computer trends overseas. Members can enroll in free online professional seminars taught by leading instructors across the country.

3.3.3.8
Picture Support Forum **PICS**

The Picture Support Forum is dedicated to expanding the availability of online graphics. This forum is for the exchange of information on how to create and upload graphics files. It will provide graphics files for those without the ability to create them and maintain a display area of graphics files for downloading. Members can share information about their techniques, tips and traps.

3.3.6.1.2
Macintosh Business Forum **MACBIZ**

The MAUG Macintosh Business Forum is for Macintosh users in the business world. A variety of subjects are discussed in this forum: productivity software, spreadsheets, databases, desktop publishing, networks and accounting.

3.3.6.5
DEC Users Network **DECUNET**

The DEC Users Network is comprised of three forums: the DEC PC Forum (GO DECPC), the PDP-11 Forum (GO PDP11) and the VAX Forum (GO VAXSIG).

3.3.6.11
Tandy Users Network **TANDYNET**

The Tandy Users Network comprises eight Tandy product services: the Color Computer Forum (GO COCO), the LDOS/TRSDOS6 Forum (GO LDOS), the Model 100/Portables Forum (GO M100SIG), the OS-9 Forum (GO OS9), the Tandy Professional Forum (GO TRS80PRO), the TANGENT Forum (GO TANGENT), the Fort Worth Computer Chronicles (GO FWCC) and the Tandy Corporation Newsletter (GO TRS).

3.3.10.2
Aldus Forum **ALDUS**

If you're interested in desktop publishing and Aldus Pagemaker, you'll want to join the Aldus Forum. In addition to idea exchanges with other users, detailed information on new product releases is available. Libraries contain technical support notes, templates for design formatting, and uploadable public domain and shareware programs. Aldus Forum is operated by the Aldus technical support staff, who answer questions within 24 hours.

3.3.10.3
Ashton-Tate Support Library **ASHTON**

The Ashton-Tate Support Library is an easy-to-use, menu-driven reference center and forum for users of dBase II and III, Framework and Multimate. The library is maintained by the A-T Software Support Center, which provides new product updates and announcements. The Ashton-Tate Forum (GO ASHFORUM) and monthly user surveys give members a direct line to A-T decision makers.

3.3.10.19
Microsoft Connection **MSCON**

The Microsoft Connection is operated by the Microsoft Product Support Group for all users of their software. Members can ask questions directly to Microsoft or share information with other members. The Common Questions and Answers section may resolve your problem on the spot. Additional features include product release announcements, training information and a directory of Microsoft centers around the world.

3.3.10.16
Living Videotext Forum **LVTFORUM**

Living Videotext (LVT) is the developer and publisher of ThinkTank, Ready! and MORE. Living Videotext Forum was established to give support to users of idea processing software products. You can give your ideas, questions or suggestions directly to the president of LVT.

8.1.4
Gaming Connection **GAMECON**

The Gaming Connection consists of three areas: *The Electronic Gamer* (GO EGAMER), the Gamers' Forum (GO GAMERS) and Multi-Player Games Forum (GO MPGAMES).

8.6.1
Advanced Digital Football **ADFL**

Armchair athletes, push aside that popcorn. The Digital Football League has drafted you to coach your team in a simulated contest. You can select your team, your opponent, and level of coaching involvement. You can call offensive and defensive plays using established strategies, or be creative and invent your own.

8.6.2
Air Traffic Controller **ATCONTROL**

If you have nerves of steel and like the challenge of thinking at several levels at once, Air Traffic Controller could be your game. As a controller, you're responsible for all planes within your sector of airspace. The object is to keep them from running out of fuel or crashing.

You must clear planes for arrival and landing while keeping track of those arriving from other sectors. Neighboring sectors may be controlled by other ATC players, challenging your communication skills as well as your nerves. Once you've built up your confidence, you can start again at an increased level of difficulty.

3.3.3.8
Photography Forum **PHOTOFORUM**

Shutterbugs of all levels, professional and amateur, can meet in the Photography Forum. Members can discuss photography equipment, film types and camera techniques. Professionals can communicate with others in the business and share money-making ideas.

3.3.10.14
Javelin Forum **JAVELIN**

Javelin Software's business analysis and reporting system uses a more structured approach to model building than the traditional spreadsheet. The Javelin Forum helps you take full advantage of Javelin's capabilities. These capabilities include the ability to "look behind the numbers" to determine where a specific number comes from and view problems in several ways including worksheets, formulas and presentation-quality graphs. Members of Javelin Software Corporation are online to answer your questions and provide technical support.

3.3.10.25.8
Lotus Graphics Products Forum **LOTUSGRAPHICS**

Users of Freelance, Freelance Plus and Graphwriter can exchange ideas in the Lotus Graphics Products Forum. Members discuss graphic business communication such as charts, diagrams, word charts, freehand drawings, symbols and maps. Data libraries contain public domain software and symbols. A catalog of member interests and specialties can put you in touch with compatible fellow members.

3.3.10.5.6
Borland Application Products Forum **BORAPP**

The Borland Application Products Forum is for users of the Borland Application Products—SideKick, SuperKey, Turbo Lightning and Reflex. Members can talk to other members or ask technical questions from the Borland technical support representatives. Data Libraries contain patches, enhancement programs and product information.

6.1.1.2.3
Dutchess CompuLease **DU**

Dutchess CompuLease is an alternative to the automobile marketplace. With Dutchess CompuLease there is no need for down payments and no need to go through dealer shopping. From the comfort of your home, you can pick the auto of your choice and let Dutchess CompuLease do the rest. An online credit application is available. Leasing may be the best way for you to drive that new car you want.

6.1.1.3.4
Small Computer Book Club **BK**

Finally a book club devoted to books on computers! If you join the Small Computer Book Club you will receive a free book, *How To Get the Most Out of CompuServe*. You also can choose an outstanding set of books for a low introductory price. Each set brings you the latest tools, techniques and ideas so you can get the most out of your personal computer. And best of all, you save up to 95 percent off the publisher's price.

6.1.1.4.1
Aaxion Tech Network **ATN**

The Aaxion Tech Network is a store for big kids who enjoy high-tech toys. The Aaxion personal computer product catalog includes software books, computers, office supplies and custom-made vinyl dust covers for computer equipment.

6.1.1.4.5
IBM Canada LTD **IBM**

Through IBM Canada LTD, Canadian subscribers can request free information on many IBM products and services available in Canada. Product information includes PCs, printers, software, computer services, educational services and supplies.

6.1.1.4.11
SAFEWARE Insurance **SAF**

Your computer may be your biggest investment after your home and car, and it makes sense to insure it. Vulnerable to theft, power surges and coffee spills, expensive hardware and software usually is not covered completely by traditional insurance.

SAFEWARE is an independent insurance agency that specializes in coverage for high-tech electronic equipment including hardware, software and media. Special coverage is available for overseas locations, rental equipment and high value systems.

6.1.1.7
B & K Beauty Supplies **BS**

B & K Beauty Supplies, a professional haircare center, carries a large selection of retail professional care products for hair, skin, nails and bath. You can choose from quality name brands such as Paul Mitchell, Redken, Nexxus, Sebastian International and Aveda. If your favorite professional brand is not listed, B & K Beauty Supplies will find it for you. You can order online or send for their complete catalog of beauty products.

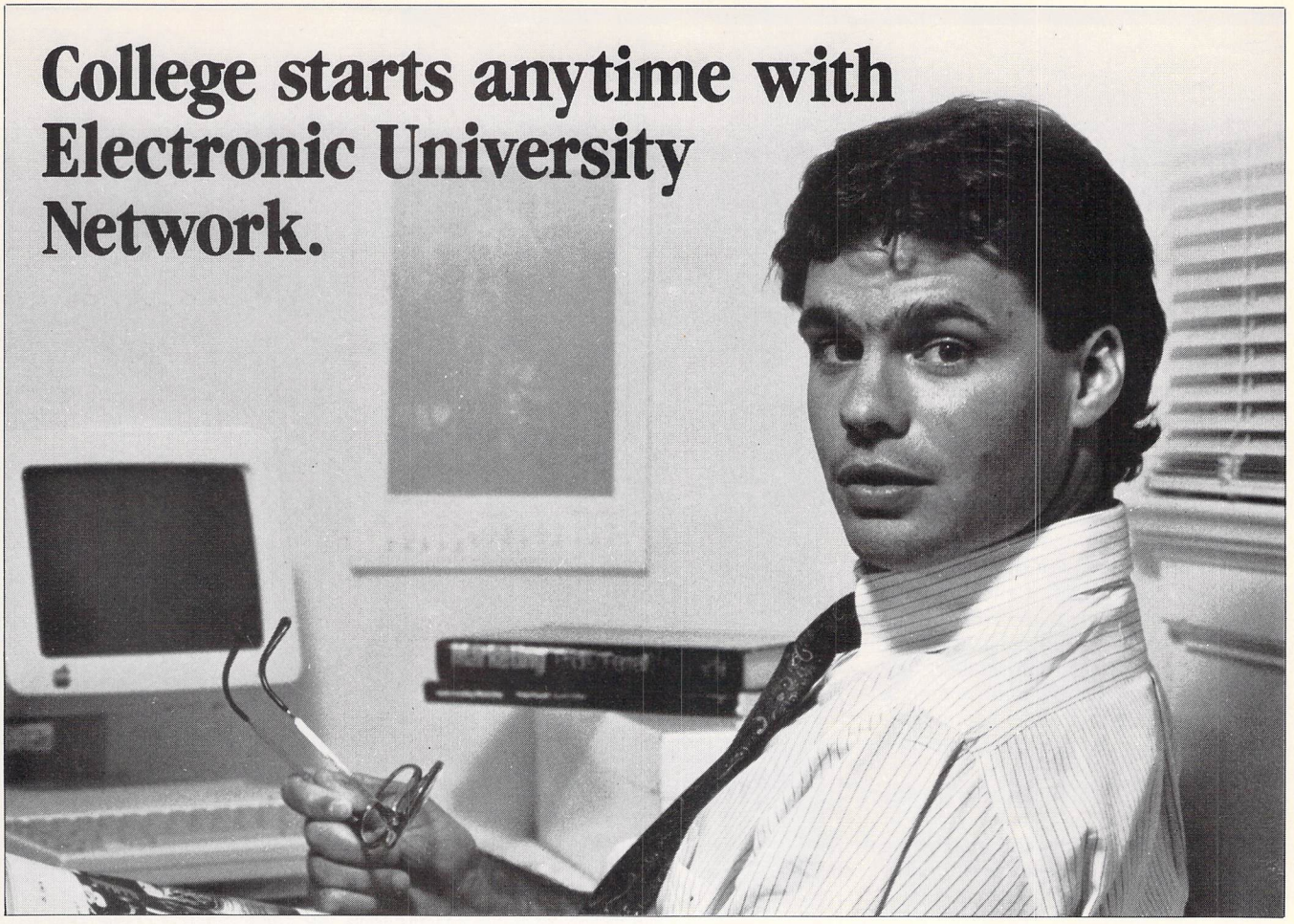
6.1.1.8.1
Black & Decker Powerline Network **BD**

Shop for Black & Decker power tools at the new Black & Decker Powerline Network. You will find a wide variety of quality power tools for your auto, garden, workshop and hobby projects. The Powerline Network is an independent Black & Decker distributor that offers many exclusive items to CompuServe subscribers. The Super Discount Special of the Month offers fantastic savings.

10.7.2.6
Rehabilitation Engineering Research and Development **REHAB**

The Rehabilitation Engineering Research and Development database is part of the Handicapped Users' Database (HUD). The Rehab Database carries information on rehabilitation engineering for researchers, educators, handicapped people and their families. Information sources include the *Journal of Rehabilitation Research and Development*, the *Rehabilitation Technology Transfer Exchange Newsletter* and a current bibliography of relevant articles. Progress about ongoing research and a calendar of upcoming conferences keep members up-to-date.

College starts anytime with Electronic University Network.



No parking. No schedules. No hassle. No reason to wait.

For some time now I've wanted to go back to college and complete my degree. But with a demanding job, a family, a busy schedule, it's not easy to find the time. On-campus education is just not practical for me.

This year I'm completing courses toward my degree at home, at my convenience, through **Electronic University Network.**

By connecting my home computer to EUN, I can pursue an undergraduate or MBA degree. Over 100 courses are available from expert instructors and accredited colleges and universities across the country. Instruction is one-on-one, interactive, motivating.

What's more, since my courses are for college credit, my company is covering virtually all of the costs through its Tuition Reimbursement program.

Affiliated Colleges and Universities:

Boston University
California State Polytechnic University
John F. Kennedy University
Memphis State University
Ohio University
Oklahoma State University
Pennsylvania State University
Regents College Degrees of the University of the State of New York
State University College at Buffalo
Thomas A. Edison State College
University of Illinois
University of Iowa
University of Maryland University College
University of San Francisco
Washington State University

Earn college credit or a degree right at home, using your personal computer

Send $5 for a 1987 Catalog:
Electronic University Network
1150 Sansome Street
San Francisco, CA 94111

Or call toll-free:
800-22-LEARN
800-44-LEARN
(if calling from California)
Now available on CompuServe!

GO OLI or circle 13 on the Reader Service Form.

NAIC Forum Trains Do-It-Yourself Investors

Both experienced and new investors can gather valuable information about the overall operations of various companies through the National Association of Investors Corp. Forum on CompuServe (GO NAIC).

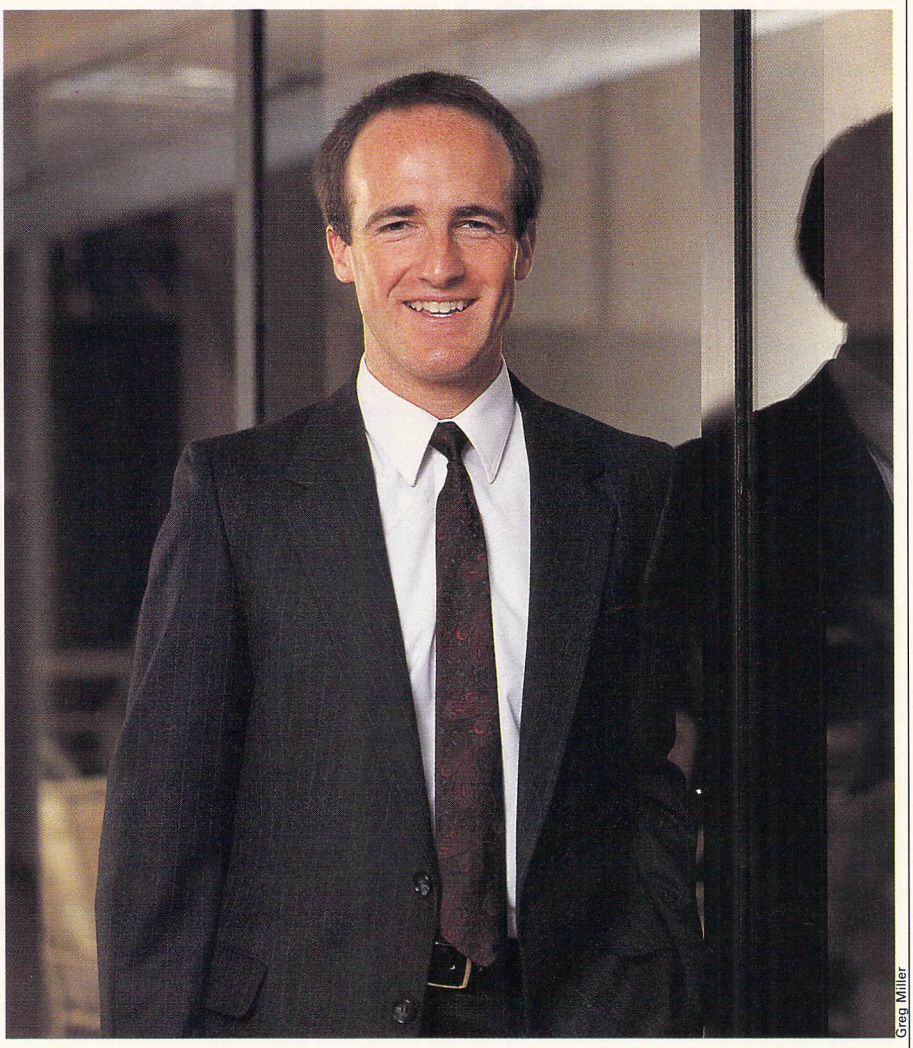
The service, which went online earlier this year, is aimed at promoting better investing through education. It serves the long-term investor who plans to hold a stock for three to five years rather than the short-term trader who is most interested in market timing.

The forum does not provide investment advice. Instead, it encourages users to make their own investment decisions after arming themselves with the forum's practical information, including tips for finding quality companies, analyzing them, and reaching conclusions about their investment potential.

The NAIC Forum can help investors form a well-rounded perspective of a company's operations and management as corporate NAIC members provide quarterly and annual financial data when it is released. "The NAIC Forum is an excellent place for the novice to learn how to interpret publicly-available information found online. Experienced investors can benefit from the information on specific companies," notes Steve Ball, CompuServe product manager.

Ball explains that the NAIC Forum focuses on how a company's management is likely to affect stock performance. Forum members also can enter the conference area to discuss investment ideas. "NAIC gives its members a focused place to get corporate information and the NAIC plans to add new corporate members to increase available information," says Ball. NAIC recognizes about 24 corporate members, including National Cash Register, American Electric Power, Wendy's, McDonald's and Abbott Laboratories, that work closely with NAIC information providers. NAIC members can purchase these corporate stocks directly and save brokerage fees.

The NAIC Forum also offers in-depth online studies of various companies, with a new company featured in the data library's corporate reports section each month. PepsiCo and Huntington Bankshares are recent examples. The studies cover a company's historical earnings in comparison to those of the industry and market.



Greg Miller

Time spent in NAIC Forum produces returns: *Ball stresses education*

"They do a broad-based discussion of what the company is doing in its operations, how its performance ranks with the rest of the industry and the company's plans for the future," says Ball. "They also try to provide an indication of any problems within the company, such as debt, projections of the company's price of stock and the projected earnings."

The forum's data libraries also include discussions of current topics, recent studies, a list of undervalued stocks, public-domain software, non-copyrighted reports and articles, and transcripts of online conferences. Each company is outlined in the standard NAIC evaluation form, which includes five years of earnings data, NAIC ratios and percentages, pricing information, buy ranges and hold ranges. NAIC develops its own ratios that are accompanied by interpretations to help NAIC members evaluate companies.

The NAIC Forum differs from the Investors' Forum (GO INVFORUM) in that the NAIC Forum "tends to focus on the company, while the Investors' Forum covers a broader scope of topics, providing a popular way for experienced investors to exchange ideas and increase their expertise," says Ball.

"I tend to steer new investors towards the NAIC group because it has more of an education focus than the Investors' Forum does," Ball adds. "If a member has a question about data or a particular company, he or she can discuss it with the NAIC staff and other members. This is a primary advantage of the NAIC Forum." Members can share their personal preferences through Data Library 6, "My Favorite Stock." Eventually, conferences with special guests will be scheduled.

—Kathy Baird

PRLink Joins PR Forum

The Public Relations and Marketing Forum has a new look since it joined forces with PRLink, formerly a private forum sponsored by the Public Relations Society of America.

The merger of the two into the 2,000-member PR Forum has created a unique source of information for the public relations practitioner. In addition to tips and case studies on public relations problems and situations, the forum now offers a national job bank, the latest PRSA news and professional quality electronic seminars with nationally recognized experts. Except for the regular CompuServe connect charges, use of all files and sections is free to PR Forum members.

The inclusion of PRLink adds a new dimension to an already successful forum, according to Forum Administrator Ron Solberg. "PRLink occupies five data libraries with special files on PRSA information and news, job openings, seminars and conferences, case studies and association business," he says. "PRSA's Technologies Task Force even holds its meetings online, with members from around the country checking in periodically for a real-time conference.

"PR Forum continues to be a good place to get information on subjects that would normally be quite hard to find," Solberg says. "Most practitioners have a community-based network where they share information and receive support. But the field is becoming more specialized and complicated, and it is often difficult to find the sources you need on such an informal basis. The forum allows you to put out a question on any topic without having the slightest idea where the answer will come from."

One advantage to the merger that is already being hailed by the forum members is the convenience of having both forums in one online location. Rich Feldman, the assistant forum administrator in charge of PRLink, called this "the achievement of critical mass." He says there is significantly more activity in the PR Forum since the merger with PRLink.

In addition to the popular job bank of nationwide public relations openings, expanding online education opportunities is the primary focus of PRLink. Recent topics have included public relations and ethics, tax laws, fundraising via direct-mail campaigns and technology and public relations. The idea is to bring the top minds of the industry together with professionals working in the field. A "talk back" section, which is regularly downloaded and forwarded to the PRSA president, includes members' advice, questions and opinions.

The best reason for joining the forum, according to Solberg, is the value of serendipity. "You don't always know what you don't know," he philosophizes, adding that scanning the message boards and data libraries or attending an online conference can often produce answers to questions that haven't even been asked.

To find out more about the Public Relations and Marketing Forum, type GO PRSIG.

—Cathryn Conroy

Business Briefs

ENS Charges Surcharge

The Executive News Service now has a $15 per hour surcharge at all times in addition to base connect rates. This change makes the standard-time surcharge equivalent to the prime-time surcharge. Base connect rates will remain the same.

ENS, a clipping service, includes the Associated Press national and state wires, *The Washington Post* and OTC NewsAlert. ENS scans the news wires around the clock, allowing stories to be "clipped" based on the subscriber's selected keywords and to be put into the subscriber's online folder.

To access the Executive News Service, type GO ENS at any CompuServe Information Service prompt.

News-A-Tron Posts Daily Updates

News-A-Tron now provides daily updates of foreign exchange market pricing with helpful background summaries of economic and political trends affecting foreign currency.

These foreign exchange figures provide US dollar figures and the relative value of foreign currency. The figures may be used to compare one foreign currency to another, given the common conversion figure in US dollars.

This information will be updated twice daily with the current market prices. News-A-Tron also provides daily-updated commodities information.

To evaluate your commodity portfolio or to follow the market using this up-to-date information, type GO NAT at any CompuServe Information Service prompt.

For More Business Information

To obtain more information about capabilities offered to CompuServe's business information customers, contact the CompuServe branch sales office nearest you:

Phoenix, Ariz.
602/997-4422
Irvine, Calif.
714/752-7240
Los Angeles, Calif.
213/216-5867
San Francisco, Calif.
415/777-2737
Santa Clara, Calif.
408/727-1468
Denver, Colo.
303/629-5514
Westport, Conn.
203/222-1853
Washington, D.C.
703/391-0010
Miami, Fla.
305/264-6094
Atlanta, Ga.
404/231-1440
Chicago, Ill.
312/782-5409
Indianapolis, Ind.
317/635-9686
Louisville, Ky.
502/585-4016
Boston, Mass.
617/235-0772
Detroit, Mich.
313/362-1860
Minneapolis, Minn.
612/338-5678
St. Louis, Mo.
314/241-0700
Parsippany, N.J.
201/898-1944
New York, Commercial
212/486-2440
New York, Financial
212/668-0471
Cincinnati, Ohio
513/771-8111
Cleveland, Ohio
216/241-6818
Columbus, Ohio
614/792-1301
Dayton, Ohio
513/223-6875
Toledo, Ohio
419/243-2600
Philadelphia, Pa.
215/563-7607
Pittsburgh, Pa.
412/391-8845
Memphis, Tenn.
901/452-8251
Dallas, Texas
214/953-0207
Houston, Texas
713/237-8582

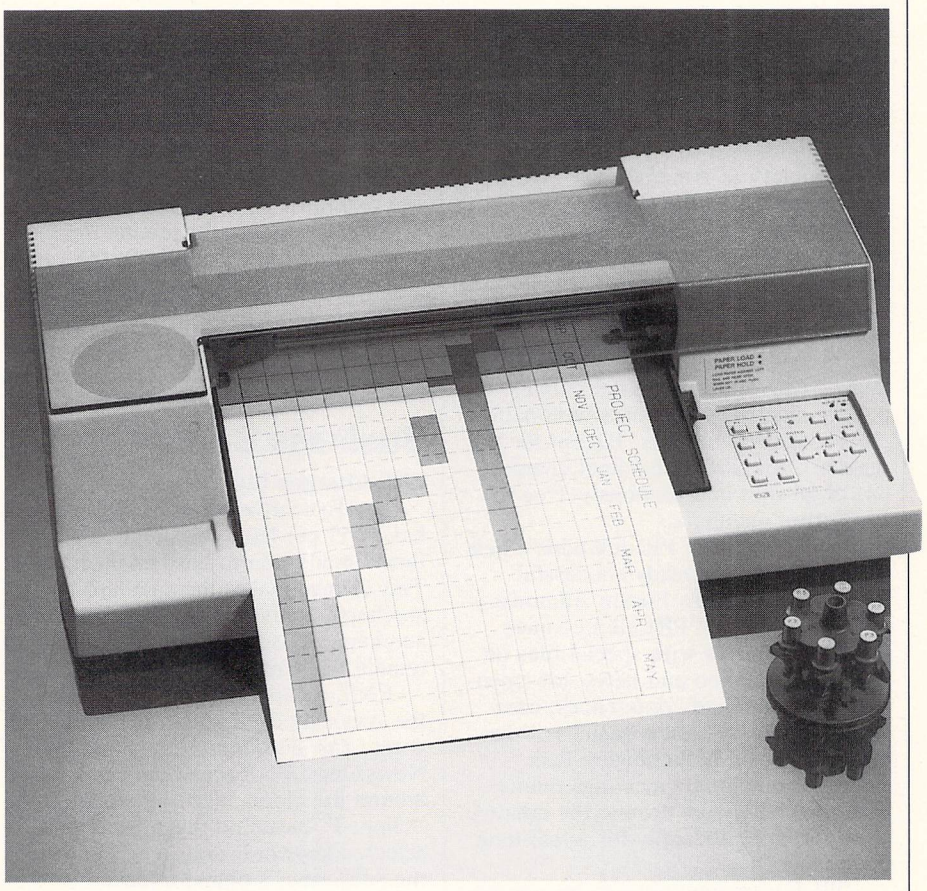
Hewlett-Packard 7475A

Graphics Plotter Performs Superbly

Hewlett-Packard Co.
Peripherals Group
16399 W. Bernardo Dr.
San Diego, CA 92127-1899
619/487-4100

Computers: Any computer with an RS-232C/CCITT V.24 serial port; also available with Hewlett-Packard Interface Bus (HP-IB meeting IEEE 488-1978 specification).
Operating System: As appropriate for computer.
Features: Six-pen plotter with automatic pen changing and capping; 0.3mm and 0.7mm fiber-tip paper or transparency pens; interchangeable pen turrets; paper or transparency media in ANSI A (8.5 by 11 inch), ANSI B (11 by 17 inch), ISO A4 (210 by 297mm) and ISO A3 (297 by 420mm) sizes; 0.001 inch resolution; 15.0 inches per second pen speed; pushbutton front panel for manual control; eight built-in line types; 19 internal character sets (fonts) in several languages.
Options: Various interface cables are available, as are extra pen turrets (carrousels), pen organizers, a digitizing sight, plotter stands and assorted plotting supplies.
Model Tested: HP 7475A Option 001 plotter (RS-232C interface) driven via HP 17255D "modem-eliminator" cable by a 640K Compaq Deskpro using serial port COM1 on an IBM Asynchronous Communications Adapter.
Base Prices: $1,895 for plotter; $40 to $100 for interface cable depending on connected computer.

Reviewed by Ernest E. Mau



Anyone seriously involved with graphics should consider owning a good plotter. Although dot-matrix and laser printers suffice for some needs and are supported by many CAD, charting and presentation programs, dot printouts cannot provide the visual impact of a finely drawn color plot. Of course, bargain-priced plotters put lines on paper, but it takes a precision instrument to prepare truly usable charts and other graphics.

Hewlett-Packard's 7475A plotter is a precision instrument for ANSI A-size and B-size drawings or ISO A4 and A3 equivalents. It draws with one pen at a time but is considered a six-pen plotter because its rotating carrousel or turret holds six pens. The plotter takes pens from the turret and returns them as needed, and a self-capping mechanism keeps pens from drying out quickly. Plotting is done by moving a pen along one axis and moving the media perpendicular to the pen motion.

This isn't the cheapest desktop plotter available. Some other brands and some Hewlett-Packard models cost far less than the 7475A, so why spend more for this machine?

Consider its precision. The 7475A can plot 1,000 points per inch with 7,963 by 10,366 points on A-size media or 10,366 by 16,641 points on B-size media. Laser printers achieve only 300 dots per inch. An Epson FX-85 printer reaches only 240 horizontal and 72 vertical dots per inch.

The plotter has a tremendous edge in discrete points it can address, but remember that precision and resolution aren't the same. The smallest 7475A pen tip is 0.012 inch (0.3 mm) in diameter and covers about 12 dot positions in any direction, so plotting 1,000 dots per inch yields a dense solid.

Accuracy is important, and Hewlett-Packard claims the 7475A can return to the same point within 0.004 inch (0.1 mm) with no pen change. I plotted a dot-by-dot raster scan of a complex multiscreen drawing. The plot took three hours using four passes with different pens and at least 150,000 pen and paper movements. Under magnification, the last dots were within 1/16 to 1/8 of a dot diameter (0.0008 to 0.0015 inch with 0.012-inch pen tips) of their true positions. Remarkable for all that pen and paper motion.

I also plotted a complex CAD drawing four times in succession without changing the paper. Although each 20-minute pass required dozens of pen changes, it was hard to tell that plots had been overlayed except for the dense inking. Line widths hadn't changed noticeably, and separations of one or two pen diameters between adjacent lines remained visible.

Another critical consideration is software compatibility. If a plotter isn't supported by a program, it is useless. That isn't a worry with the 7475A. I've tried nearly a hundred plotter-capable CAD, charting and presentation graph-

ics programs. Every one drives the 7475A. Furthermore, it is the only plotter some programs support. No other plotter brand and no other Hewlett-Packard model is as widely supported.

I had doubts about some IBM Personally Developed Software products because IBM is too arrogant to mention hardware other than IBM brands. However, software set up for the IBM 7371 through 7374 plotters works fine with the HP 7475A

Although many programs generated beautiful plots, not all used the plotter to best advantage. A few generated lackluster plots. Two programs wouldn't work with the standard HP 17255D cable and needed custom-built cables not compatible with other programs. Others required resetting the plotter speed to 1200 or 2400 baud instead of 9600 baud. Others used dot-by-dot scans instead of drawing vectors and beat pens to an early death, flattening them long before they ran out of ink. Only a few programs allowed changing pen turrets during a plot to maximize color use, with others merely wrapping around through pens in one turret so color 7 uses pen 1, color 8 uses pen 2, etc. All these were software problems, not plotter problems.

Note that the 7475A does not support hardware "polygon fill," where single HP-GL language commands perform complex operations like edging entire polygons. This isn't a problem for most software, but VersaCAD Designer needs hardware polygon filling for 3D shaded models and cannot simulate it from software. Despite VersaCAD's Designer's claims to the contrary, the 7475A cannot properly handle its 3D shading. Before choosing the 7475A, prospective buyers should be sure their software simulates polygon filling directly.

My one complaint about the plotter is that it emits an annoying growling noise while drawing curves from right to left. This happens only in that particular direction and has no apparent effect on the drawing, but it is distracting.

Prospective buyers shouldn't expect the 7475A to serve double-duty as a digitizer. A sight and programming instructions are available, but no commercial software I've seen supports it.

Still, outstanding precision and accuracy combined with virtually universal software support make the 7475A an excellent plotter. Despite a high initial price, it is my personal choice.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: Compaq and Deskpro (Compaq Computer Corp.); Epson FX (Epson America Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); VersaCAD and VersaCAD Designer (VersaCAD Corp., formerly T&W Systems).

GO OLI or circle 15 on the Reader Service Form.

MACINTOSH USERS

Put your spreadsheets, drawings, charts, newsletters or blueprints up on the bulletin board. Send them through e-mail.

You just need **Glue** and your partner on the other end needs **Glue.** But you don't need to worry if he or she owns all of the other programs you use to make graphics.

GLUE

GLUE provides you with a "print to disk" capability that makes "Images" out of the information that you would have printed on paper. **Glue** "Images" can be transmitted by any system that can handle binary file transfer. **Glue** "Images" can be viewed, printed or copied by any one else who has **Glue. Glue** retails for $59.95 and is available from local dealers or directly from:

Solutions International
29 Main Street
Post Office Box 989
Montpelier, Vermont 05602
802 229 9146
CompuServe 76174,2352

Special Introductory CompuServe price! $15 off on the second copy ordered, if ordered directly from **Solutions International** *with a mention of this ad. Remember it takes two Glues to tango.*

GO OLI or circle 16 on the Reader Service Form.

FiveStar FS286 File Server:

PC-AT Compatible at a Low Price

FiveStar Electronics
3220 Commander Dr., #102
Dallas, TX 75006
214/733-410

Computer: FiveStar FS286 File Server (compatible with IBM PC-AT).
Operating System: None included; runs PC-DOS and MS-DOS versions 3.0 and later.
Features: 80286 microprocessor, 1024K RAM on system board, TEAC 1.2MB diskette drive, floppy and hard-drive controller card, AT-style keyboard, software-selectable 6MHz or 8MHz CPU clock, 12 expansion slots and three-year warranty.
Options: Extensive choice of monitors, video adapters and other expansion cards, hard disks from 10MB to 82MB, large-capacity drives from 43MB to 160MB.
Model Tested: 1024K FS286 File Server with Seagate 30MB 35ms hard disk, TEAC 360K floppy drive, FiveStar colorgraphic video card with printer port, FiveStar AT I/O card with serial and parallel ports, Intel AT 80287 8MHz math coprocessor and Goldstar RGB Monitor; running PC-DOS 3.20 and MS-DOS 3.20.
Base Price: $1,495 ($3,115 equipped as tested).

Reviewed by Hardin Brothers

FiveStar's FS286 File Server is not a dainty, "pretty" computer. The case is 21.3 inches wide, 17.3 inches deep and 6.8 inches high; the keyboard is 18.3 inches wide by 8.3 inches deep. Unless you plan to put it on a floor stand, you'll need a strong desk with more than two square feet of clear space to hold this machine.

A look inside the FS286 shows the reason for the large box. There are 12 slots in this computer. The model tested has six 8-bit slots compatible with IBM PC and PC-XT add-on boards plus six 16-bit slots compatible with PC-AT add-on boards. There also is room for two half-height floppy disk drives, a full-size or two half-height hard disks (a 30MB hard disk is installed) and a large 242-watt power supply.

Three slots in the review unit are used by necessary interface cards supplied with the computer, namely a CGA-compatible video card, a disk controller card and a combined serial/parallel I/O card. That leaves four 8-bit slots (three half-length) and five 16-bit slots for future expansion. Unfortunately, the cable connectors on the disk controller card are too large and make a second half-length 8-bit slot almost unusable. I cannot make any card fit beside the disk controller.

The framework of the FS286 is remarkably rugged. Both the main case and the cages around the disk drives are heavy-gauge anodized steel that should be able to withstand more than normal abuse. Dropping the FS286 might damage that hard disk drive, but the rest of the computer probably would survive unscathed.

The FS286 runs at two clock speeds: 6MHz and 8MHz. A supplied program, CPU.COM, lets the user select between the two speeds and designate either as the default speed, but there is no hardware switch for changing speeds. An internal battery runs a real-time clock and the necessary electronics to remember the boot speed while the computer is turned off.

The first indication of the FS286's speed came when I booted the computer. Including checking its 1024K of memory, a hard-disk cold boot from either turning on power or pressing the reset button on the back of the computer takes less than 20 seconds. Warm boots skip the memory check and takes less than eight seconds. Both times include a pause while the computer looks for a diskette in drive A.

At 8MHz, the FS286 earns a 7.7 rating from the Norton Utilities System Information test, meaning that it runs 7.7 times faster than a standard IBM PC. This speed seems blinding at first, but some 8MHz AT-clones run up to 30 percent faster than this because they run without the one memory wait state the FS286 designers found necessary. However, the hard disk installed in the test unit is very efficient with its 35ms access time. For many programs, hard-disk speed makes more of a difference in system performance than either the number of wait states or the computer clock speed.

The keyboard has a nice, solid feel, but unfortunately has a standard AT configuration: 10 function keys on the left of the keyboard, combined numeric keypad and cursor movement keys and no return key on the numeric keypad. The keyboard has indicator lights for Scroll Lock, Num Lock and Caps Lock status.

There also are two lights on the front of the computer near the key switch. One indicates whether power is on. The other shows hard-disk accesses since the entire hard disk is hidden inside the computer.

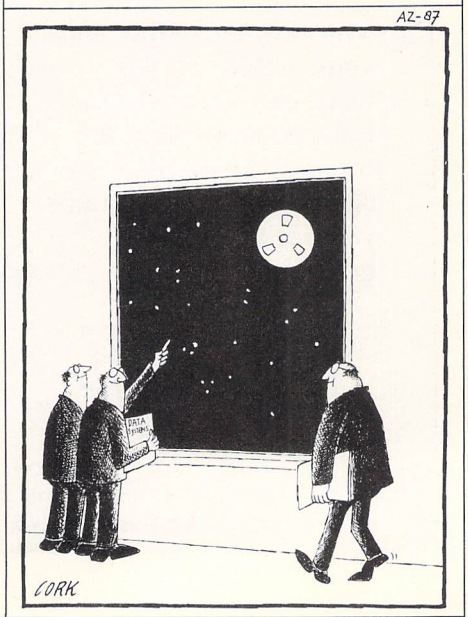
The FiveStar color graphics (CGA) video board is a big disappointment. Many programs that run flawlessly on other computers produce unacceptable static or "snow" on the screen. I also am surprised and disappointed that both serial connectors on the back of the computer are female. Although correct by RS-232 standards, they are the opposite of the "IBM" standard and require an adapter plug to run serial devices with cables I now have.

The three-year warranty and strong construction of this computer inspire confidence, and the computer ran everything I tried (including Lotus 1-2-3, release 2.01) without problems. If there were fewer compromises, such as making all expansion slots accessible, providing a better keyboard layout or running at 8MHz without wait states, this would be a nearly ideal 80286 computer at an attractive price.

Hardin Brothers is a writer, computer programmer and teacher living near Los Angeles. He is a frequent contributor to several computer magazines. His CompuServe User ID number is 72165,735.

Trademarks: FiveStar and FiveStar FS286 File Server (FiveStar Electronics Inc.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Lotus 1-2-3 (Lotus Development Corp.); MS-DOS (Microsoft Corp.); Norton Utilities (Peter Norton Computing Inc.).

GO OLI or circle 17 on the Reader Service Form.



Visionary 1200XT:

More Than Another Smart Modem

Visionary Electronics
141 Parker Ave.
San Francisco, CA 94118
415/751-8811

Computers: Any RS-232C compatible terminal or computer.
Operating System: Not applicable.
Features: Programmable "smart" modem compatible with the "AT" or "attention" command set; communication speeds to 1200 bps; 8K to 48K internal modem memory; internal clock/calendar; auto-dial and auto-answer capability; password and caller dial-back security features; semi-automatic electronic mail capabilities.
Options: Additional memory.
Model Tested: 48K Visionary 1200XT connected to 640K Compaq Deskpro with one 1.2MB diskette drive, one 360K diskette drive and one 20MB hard disk.
Base Prices: $395 with 8K memory; $495 with 48K memory.

Reviewed by Harry Green

In this world of clones and look-alikes, it is refreshing to find a modem that claims to be something more than another Hayes Smartmodem. The Visionary 1200XT supports most of the Hayes command set, but compatibility is one of the least important reasons for selecting it. This is no ordinary modem; it is not only as smart as the next modem, but it also has a memory —48K of it to be exact. If you're wondering why memory is in a modem, the answer is that it can be attached to a telephone line without a terminal.

In a stand-alone mode, the 1200XT can answer the telephone and carry on a semi-intelligent conversation with a terminal. It answers with an optional answerback phrase, and it receives and stores incoming messages. Furthermore, it is smart enough to answer the line only during specified hours. This is invaluable for someone who uses the line for a voice telephone during the day but wants the modem to monitor it outside normal working hours. It is just the thing for people who hate telephone-answering machines; attach the 1200XT to the line and you'll get messages only from people who call from a terminal.

Within limits of its memory, the 1200XT can serve as a reasonably effective electronic mailbox. You can restrict access to those who enter the right password or instruct it to dial back the caller, which is probably the most effective security method available. If messages are left, they are identified in sequence. When a caller hangs up, a message waiting light blinks. The only time you need to attach a terminal is to compose new messages or read existing ones.

Memory size is variable from 8K to 48K. Memory is used not only for storing messages, but also for user-written programs. For example, you can program the 1200XT to carry on a dialogue with a host, responding to requests for user number and password. You also can program more exotic functions, such as entering a list of numbers and instructing the modem to call at a specified hour and dump a message to them.

Yes, the 1200XT tells time. It has a four-digit clock on the front panel and can be instructed to perform functions according to schedule. For example, it could be told to answer the telephone only between 6 p.m. and 8 a.m.

The 1200XT has a row of four pushbuttons along one side. The fourth button is a reset that cancels the last instruction and returns the familiar "OK" prompt. The other three buttons are programmable. One use is to assign dialing and logon sequences so the modem can communicate with a host without a terminal attached. Another use could be disabling and enabling modem tones so two users can operate in alternating voice and data modes over the telephone.

Programming the 1200XT should be a snap for almost everyone because it uses English commands in addition to the Hayes command set. For example, assume you have created a telephone list called "staff" and a memorandum called "memo." The command "DIAL STAFF SEND MEMO AT 11:00 PM" does just what it says.

Although programming is easy, there is no way to edit a program except to re-enter it completely. If the modem dislikes any part, the program is rejected. This can be frustrating, particularly if you're sure the command is correct. The 1200XT repeatedly rejected "ATDT," the Hayes command to dial, even when I copied a sample verbatim from the instruction manual. Finally, I reset it completely, which dumped all programs and files, and cured what was evidently a software malfunction.

The 1200XT isn't for everyone. Many of us don't need a stand-alone modem, but there are plenty of applications where users might prefer not to tie up a terminal or computer for occasional communications. The 1200XT lacks the memory to be a full-fledged bulletin board system, but it could certainly function as an intra-company board.

A modem with smarts is a big improvement over a modem that doesn't even know enough to dial the telephone, but a modem with smarts and a memory is a step up from one that must have an umbilical cord to a terminal before it even knows the time of day. If you have an application for such a device, the 1200XT is worth more than a casual glance.

Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007,431.

Trademarks: Compaq and Deskpro 286 (Compaq Computer Corp.); Hayes and Smartmodem (Hayes Microcomputer Products Inc.).

GO OLI or circle 18 on the Reader Service Form.

Electronic Edition Hardware Reviews

The following hardware reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-220 at any CompuServe Information Service prompt.

Correspondent-T Modem
Manufacturer: *Holmes Microsystems*
Computers: *Toshiba T11000 Plus or T3100.*

PC Type Right Spell Checking Device
Manufacturer: *Xerox Corp.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles; Xerox 6060 series; AT&T 6300; Olivetti PC and others.*

IDEAcomm 1200 Internal Modem
Manufacturer: *IDEAssociates, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

EGA Multi Res Adapter
Manufacturer: *STB Systems, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

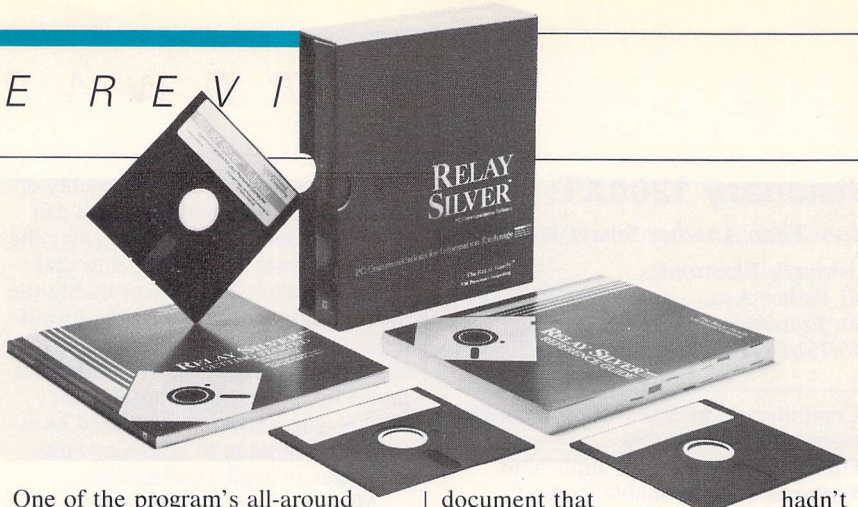
Relay Silver

Features Versatility and Background Communications

VM Personal Computing
41 Kenosia Ave.
Danbury, CT 06810
203/798-3800

Computers: IBM PC, PC-XT, PC-AT, PC Convertible or full compatibles; AT&T 6300; Compaq; special versions available for WANG PC, Data General/One and Hewlett-Packard 150.
Operating Systems: PC-DOS or MS-DOS version 2.0 or later.
Media: Requires two diskette drivers or a hard-disk system.
Copy Protection: None.
Required Peripherals: Color or monochrome monitor with video adapter card; modem (supports most common internal and external types).
Other Requirements: Minimum 192K available RAM.
Optional Items: None.
System used for test: 640K IBM PC with two diskette drives and Hayes Smartmodem 1200.
List Price: $150

Reviewed by Lindsy Van Gelder



Relay Silver (version 1.0) promises to do "more than just transfer files. (It) can change the way you use your PC in your daily work." That is a lot to deliver. But despite some flaws, the program does have many top-notch features, including ease of learning, compatibility with most communications protocols and the ability to run in the background while you use another program.

Relay Silver arrives on three diskettes designated program, help and tutorial. It is not copy-protected and installs easily. However, if you don't have a hard disk, you can't copy the entire program onto a self-loading disk unless you leave out the feature that lets your computer run unattended. That is probably the least likely feature a two-drive system would use anyway. The tutorial is clear and even clever, although it covers only the barest beginner basics.

The program comes with two manuals. "Getting Started" is where most experienced computer users will turn first, but it is organized and written so beginners will be able to understand it. The "Reference Guide" is geared almost exclusively to advanced users.

One of the program's all-around strengths is its ability to work at many levels of expertise. For instance, beginners who want to teach the program to log onto CompuServe or some other service have only to press [ALT-L] for Learning Mode the first time they use Relay Silver to get online; from then on the program knows the "script" and automatically provides user identifications and passwords whenever that service is dialed. Advanced users can write more elaborate scripts for such tedious tasks as searching databases or downloading electronic mail. Such scripts use BASIC-like commands with loops, subroutines and if/then reasoning.

Relay Silver's worst feature is its editing mode. This on-board mini-word processor combines a certain crudeness with a dizzying array of commands. For example, you have to tell it up front how many lines of type you need. Furthermore, most people who already have had to learn at least one word processing program and an online editor won't want to bother with a whole new set of commands. I would have preferred something simple but essentially invisible like editors available in other communications programs.

The program's communications mode provides sample parameters for dozens of computers and services with which you might communicate, including CompuServe, another personal computer running Relay Silver, a FIDO bulletin board or a mainframe. Your computer can emulate a DEC VT100 or VT52 terminal, you can connect using IBM's 7171 protocol converter, and there is more. The supplier claims the program can "send and receive any type of file completely error-free."

I found the directions for setting up XMODEM for CompuServe misleading and the changeover from 7-bit to 8-bit data format clumsy, but once I had tinkered with the parameters, the program performed flawlessly at 1200 baud even during CompuServe's busiest periods. I even sent a WordPerfect document that hadn't been reformatted as an ASCII file, which would have sent some other programs into the stratosphere. However, Relay Silver inexplicably changed all dashes in the file to parentheses.

The program touts an ability to run in the background of a word processor or spreadsheet. I found virtually all exits into and out of version 1.0 as buggy as Maine in June. Several times, the program crashed spectacularly, requiring that the computer be turned off and on before the screen would unfreeze.

As exasperating as these problems were, they were soon solved, thanks to the manufacturers' unusual method of updating software via a bulletin board that regularly offers program patches.

You simply log on and select the "zap" option from the menu. Files then transfer automatically to your computer, including a special BASIC file that later updates your software. Current zaps corrected bugs I'd found (and several others), speeded up certain operations and added support for the PC Convertible's internal modem.

The bulletin board also offers such niceties as sample scripts and a mailbox for contacting company representatives about any problems.

I began by disliking Relay Silver intensely because of its bugs. But once I had the program "zapped," I began to appreciate its performance. Relay Silver does many things and does them reliably. It is definitely worth a look for those with wide-ranging communications needs.

Lindsy Van Gelder is a New York-based free-lance writer and a contributing editor of Ms *magazine. Her CompuServe User ID number is 70007,1416.*

Trademarks: CompuServe (CompuServe Incorporated); DEC (Digital Equipment Corp.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); Relay and Relay Silver (VM Personal Computing); WordPerfect (WordPerfect Corp.).

GO OLI or circle 19 on the Reader Service Form.

3M Diskettes FREE!

CEI has an outstanding special on Flip 'n' File™ 15 storage cases. When you purchase a Flip 'n' File 15 storage case from CEI, you'll get 10 3M SSDD Soft Sectored diskettes free. Limited quantities available so order today. Order # **FNF-KA** ... $9.99 each. Minimum order 10 Flip 'n' File™/15.

Other 3M computer products

5¼" **5DSDD-RH-KA** ..... $0.93 each
3½" **3SSMD-KA** ..... $1.36 each
8" **8SSSD-KA** ..... $1.48 each
8" **8SSDD-KA** ..... $1.79 each
5¼" head cleaning kit **H-KA** ... $4.95 each
DC300XL-KA data cartridge ... $17.95 ea.
Minimum order 100 diskettes/10 cartridges

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

Diskettes 25¢ ea.

CEI now offers a once in a lifetime offer on 100% certified and error-free 5¼" single sided double density diskettes for only 25¢ each in multiples of 500 diskettes. If you want double sided double density diskettes these are only 27¢ each in multiples of 500 disks. Write protect labels included. Available only in multiples of 500 diskettes. Since quantities are limited, stock up now.

5¼" SSDD **MAX1D-KA** ..... $0.25 each
5¼" DSDD **MAX2D-KA** ..... $0.27 each

BIG SAVINGS!

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

Super Disk Diskettes

Super Disk™ celebrates their anniversary with super special pricing on Super Disk brand 100% certified error- free and drop-out free computer diskettes. Stock up now at these super special prices. Order only in multiples of 100 diskettes.

SAVE ON SUPER DISK™ DISKETTES Product Description	Part #	Super Disk price per disc ($)
5¼" SSSD Soft Sector w/Hub Ring Retail 10 pack	**6431-KA**	0.44
5¼" Same as above, but bulk pack w/o envelope	**6437-KA**	0.29
5¼" SSDD Soft Sector w/Hub Ring Retail 10 pack	**6481-KA**	0.48
5¼" Same as above, but bulk pack w/o envelope	**6487-KA**	0.33
5¼" DSDD Soft Sector w/Hub Ring Retail 10 pack	**6491-KA**	0.52
5¼" Same as above, but bulk pack w/o envelope	**6497-KA**	0.37
5¼" DSHD for IBM PC/AT - bulk pack	**6667-KA**	1.29
3½" SSHD (135 TPI) - bulk pack	**6317-KA**	1.09
3½" DSHD (135 TPI) - bulk pack	**6327-KA**	1.24
5¼" Tyvek® diskette envelopes - 100 pack	**CV5-KA**	10.00

SSSD = Single Sided Single Density; SSDD = Single Sided Double Density; DSDD = Double Sided Double Density; DSQD = Double Sided Quad Density; SSHD = Single Sided High Density; DSHD = Double Sided High Density

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

Dysan Diskettes

Now get wholesale pricing on Dysan diskettes from Communications Electronics Inc. while quantities last. Lifetime warranty and packed 10 to a carton with color coded diskette ID labels, write protect tabs, and heavy duty Tyvek® tear resistant envelopes.

5¼" SSDD **801187-KA** ..... $1.69 each
5¼" DSDD **802060-KA** ..... $1.99 each
5¼" DSDD 96 TPI **802067-KA** ... $2.29 ea.
Head cleaning kit **DHCK-KA** ... $9.99 each

Dysan Diskettes

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

How to order

To get the fastest delivery of your diskettes, phone your order directly to our order desk and charge it to your credit card. Written purchase orders are accepted from approved government agencies and most well rated firms at a 10% surcharge for net 10 billing. For maximum savings, your order should be prepaid. All sales are subject to availability, acceptance and verification. All sales are final. All prices are in U.S. dollars. Prices, terms and specifications are subject to change without notice. No rainchecks on out of stock items. Not responsible for typographical errors. A $5.00 additional handling fee will be charged for all orders with a merchandise total under $50.00. All shipments are F.O.B. CEI warehouse in Ann Arbor, Michigan. No COD's. Non-certified checks require 3 weeks bank clearance. Michigan residents add 4% sales tax or supply your tax ID number and reason for tax exemption.

For **shipping charges** add $6.00 per 100 diskettes and/or any fraction of 100 5¼-inch or 3½-inch diskettes. Add $1.00 per data cartridge or head cleaning kit for U.P.S. ground shipping and handling in the continental U.S. For Canada, Puerto Rico, Hawaii, Alaska, or APO/FPO delivery, shipping is *three* times the continental U.S. rate.

Mail orders to: Communications Electronics Inc., Box 1045, Ann Arbor, Michigan 48106-1045 U.S.A. If you have a Discover, Visa or Master Card, you may call and place a credit card order. Order toll-free in the U.S. Dial 800-USA-DISK. In Canada, order toll-free by calling 800-CA1-DISK. If you are outside the U.S. or in Michigan dial 313-973-8888. Telex anytime 671-0155 (6710155 CE UW). Order your disks from CEI now.

Copyright © 1986 CEI Ad #052486-KA

TDK Diskettes 96 TPI

If you need a 96 tracks per inch diskette, CEI now has an excellent price on boxed TDK product. This product is designed to store up to 780 Kb. for non-AT systems. 300 oersteds. Lifetime warranty and packed 10 to a carton with color coded diskette ID labels, write protect tabs, and heavy duty Tyvek® tear resistant envelopes.

5¼" SSDD 96 TPI **M1DX-S-KA** ... $0.89 each
5¼" DSDD 96 TPI **M2DX-S-KA** ... $0.99 each

TDK Best Buy

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

Verbatim Diskettes

Take advantage of this Verbatim Valuelife triple special. As long as quantities last, you'll first get high quality Verbatim diskettes at only 79¢ each. Second, on your order of Verbatim 5¼" single sided double density disks you'll get a FREE plastic storage case that holds 10 diskettes, and third, you'll also get a FREE head cleaning kit. Order Verbatim today.

5¼" SSDD **29633-KA** ..... $0.79 each

Verbatim Value!

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

BASF Diskettes

CEI has a super special deal from BASF. As long as quantities last, when you order BASF 5¼" Single sided double density disks from CEI, you'll get a special price of only 69¢ each. And if you order promptly, as a further bonus while limited quantities last, you'll also get a free 10 pack plastic library case. Stock up now at this fantastic low price on BASF Qualimetric Diskettes with a BASF lifetime warranty.

5¼" SSDD **54974-KA** ..... $0.69 each

BASF SAVINGS!

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

Fuji Diskettes

Fuji diskettes imported from Japan, are now available from CEI at a special price while quanties last. Fuji diskettes are packaged 10 to a carton and come with color coded diskette ID labels, write protect tabs, and heavy duty Tyvek® tear resistant envelope. Order your disks today.

5¼" SSDD **MD1D-KA** ... $0.74 each
5¼" DSDD **MD2D-KA** ... $0.84 each

Fantastic Fuji!

Credit card orders call
800-USA-DISK or 800-CA1-DISK in Canada
For information call 313-973-8888

Communications Electronics Inc.
P.O. Box 1045 □ Ann Arbor, Michigan 48106-1045

U.S. ROBOTICS
2400
BAUD MODEMS

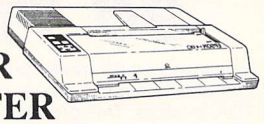
Save now on our special purchase of these high quality, high speed modems.

NOW ONLY $179

HAYES COMPATIBLE
U.S. MADE, 2 YR MFG.WARRANTY
Operates at 300, 1200 or 2400 baud.

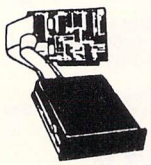
ELECTRONIC SHOPPING
MEANS HUGE COST SAVINGS

EPSON SALE
4 PEN COLOR PLOTTER



SAVE 60%
NOW ONLY $239

BROTHER
LETTER/ DRAFT
NOW ONLY $189



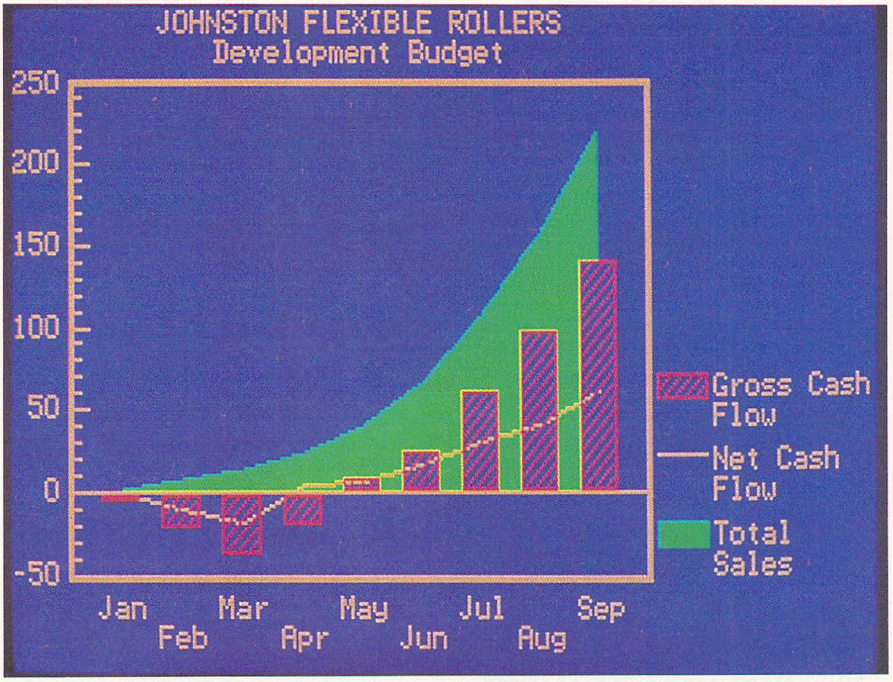
30MB
HARD DISK
WITH CONTROLER
ONLY $339
WHILE SUPPLY LASTS

HUNDREDS OF OTHER INCREDIBLE BARGAINS NOW AVAILABLE ON-LINE

The On-Line Store
will soon be joining
CompuServe's Electronic Mall,
meanwhile call our
Bulletin Board System at:
(805) 656-0379 (8/1/N)

VOICE ORDERS WELCOME TOO:
(805) 656-3741

GO OLI or circle 14 on the Reader Service Form.



Graph-In-The-Box

Makes Charts from Almost Any Application

New England Software
Greenwich Office Park 3
Greenwich, CT 06831
203/625-0062 or 800/633-2252

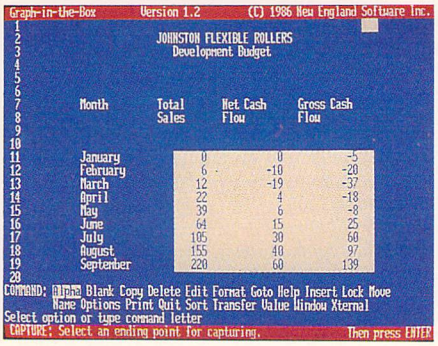
Computers: IBM PC, PC-XT, PC-AT, 3270 PC, PC Convertible and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires at least one double-sided diskette drive or a hard disk.
Copy Protection: Available in protected and unprotected versions; protected version allows one floppy disk and two hard disk installations.
Required Peripherals: Graphics-capable monitor and video adapter (supports IBM MDA, IBM CGA, IBM EGA, AST Preview!, Hercules Monochrome, Tecmar Graphics Master and compatible adapters).
Other Requirements: Memory-resident program uses 132K of RAM.
Optional Items: Printer (supports more than 80 brands and models); plotter (supports numerous brands and models).
System used for test: 640K Compaq Deskpro Model 2 with two 360K diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), 8087-2 math co-processor, Amdek Color 722 RGB monitor, Video-7 VEGA Deluxe video adapter in CGA and EGA modes, Epson FX-85 printer and Hewlett-Packard 7475A plotter; running IBM PC-DOS 2.10.
List Prices: $97.60 for copy-protected version; $147.60 for unprotected version.

Reviewed by Ernest E. Mau

Imagine that you're working with your favorite spreadsheet or word processor and have an array of numbers that would make a useful chart. If your program has built-in graphing, you might make a chart with some effort and lots of keystrokes, but you probably would be limited to just a few chart styles and layouts. If your program lacks graphing functions, you might have to do without a chart.

Now, imagine you have a memory-resident program that can capture data from the screen and forge various chart types with just a few keystrokes. It would operate without making you exit an application, would print or plot graphs, would not need tedious data conversions and would provide tools to dress up charts. That isn't a pipe dream. It is exactly what Graph-In-The-Box does.

Graph-In-The-Box (version 1.2) is an innovative product. It makes graphs using data captured from display screens of almost any application program and can be applied without learning new graphing methods for each application. It provides more flexibility



than graphing functions that are built into most spreadsheet, data management or word processing packages, and it can be used while collecting data from information services such as CompuServe.

Loaded into memory, Graph-In-The-Box waits idly until awakened by a keyboard command, when any application is suspended with its display visible. Simple cursor movements mark and capture a block of displayed data. A few keystrokes pop a chart onto the screen. From there, it is easy to edit data, choose other chart styles, enter titles, and append legends and axis labels, popping new charts onto the screen or outputting them as needed. When done, exiting Graph-In-The-Box returns you to your stopping point in the original application.

Graph-In-The-Box provides 11 two-dimensional graph styles, including vertical and horizontal bar and stacked bar, line, line-based area, step, step-based area, scatter, pie and mixed charts. Pie chart segments can be centered or exploded individually. The program provides control over foreground and background colors and over fill patterns (hatching). It also has automatic or manual scaling and can add grid lines.

Perhaps the best Graph-In-The-Box feature is its ability to perform multiple captures. Having captured some data, it is easy to move the cursor to a new location in the program's data or layout screens, call for another capture, mark new data and add that new data to the designated areas. Non-adjacent rows or columns of a spreadsheet can be captured piecemeal, even if the original application has to be scrolled to display them. Text for axis labels, titles and legends also can be captured, so they don't have to be typed individually.

Graph-In-The-Box is limited to 500 data "observations" or values, which should be enough for most users. Observations may be arranged in any way up to a maximum of 15 columns or a maximum of 200 lines in any column. Ten 50-line columns or five 100-line columns are equally acceptable.

Output functions include saving graph data to a file for later use or routing to a printer or plotter in the user's choice of size and placement on the paper. The program does not differentiate colors by using raster patterns for monochrome printer, so solids all look the same. Users of monochrome printers should graph with hatching patterns instead of solids. Furthermore, the program does not provide control over print density and does not permit multi-pass printing.

Plotter output, especially to a plotter such as the HP 7475A, is superb. The program has provisions for setting pen width and for paper or film pen speeds, so it plots excellent solids.

With its great features, there also must be shortcomings. One is that the user has no choice of font or size for titles, legends or labels. Another is lack of control over the positioning or elimination of borders and intervals between axis tick marks. Of course, this program isn't a replacement for full-blown, stand-alone charting programs.

Note that this is not a program for merging graphs into documents. I had hoped to use Graph-In-The-Box with APG Software's Inset program to generate and then insert scaled graphs directly into documents, but the two programs proved incompatible. Another incompatibility was with Framework II. Graph-In-The-Box captured and graphed data but started Framework's screen flashing so severely that it wasn't comfortably usable afterward.

Still, Graph-In-The-Box is a delightful tool. It is a "must have" item for anyone who makes charts, no matter what other graphing capabilities may already be on hand.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: Alpha-10, IOMEGA and Bernoulli Box (IOMEGA Corp.); Compaq and Deskpro (Compaq Computer Corp.); CompuServe (CompuServe Incorporated); Epson and Epson FX (Epson America Inc.); Framework II (Ashton-Tate); Graph-In-The-Box (Idé-Data Lingheim & Rudolfson AB and New England Software Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Inset (American Programmer's Guild Ltd.); MS-DOS (Microsoft Inc.); VEGA Deluxe (Video-7 Inc.).

GO OLI or circle 21 on the Reader Service Form.

MindWrite:

Impressive Outliner and Word Processor

MindWork Software
P.O. Box 222280
Carmel, CA 93922
408/624-0522

Computers: 512K Macintosh or XL/Macworks.
Operating System: Macintosh System.
Media: Standard Macintosh 3.5-inch diskette; requires one drive.
Copy Protection: None.
Required Peripherals: None; will not work with 128K Macintosh.
Optional Items: Second diskette drive, hard disk, modem, Apple ImageWriter or LaserWriter printer.
System used for test: Macintosh Plus with Apple ImageWriter printer.
Retail Price: $125

Reviewed by Cheryl Peterson

MindWrite soon may become the word processor of choice for many Macintosh users. At $125, it is the same price as MacWrite, which is no longer being distributed with new Macintosh machines. While MindWrite offers many improvements over MacWrite's capabilities, it doesn't offer two features that some users would want: column mode and address or data merging.

MindWrite documents can be created in the normal fashion. Open a file and start writing. If you prefer to do a little preliminary work, MindWrite has a well-designed outlining function built in. The many levels of outline can be indented for easy identification. Diamonds or numerals can be used to set off the levels. These easily translate into bulleted entries if you want to use them in a word processing document.

It is easy to transform information from outline to manuscript and back. Rulers that control margins, tabs, justification and other formatting are used by both outlines and manuscripts, and you may have as many rulers as you need to put your information in order.

The headers and footers are great. You can put graphic information in them, plus time, date, page number and document name. By positioning any of four control icons within a header or footer, the appropriate information will be inserted at printout.

One option in the format menu con-

trols formatting for headers and footers. With this dialogue box, you specify whether the date printed is the current date or the document creation date. You can choose whether headers and footers are displayed on each page while editing. You can set each to appear on all pages, all pages except the first or on the first page only. This gives great flexibility.

A "special preferences" menu controls some interesting parameters, such as whether to save files in MindWrite, ThinkTank or ASCII text format. You can set the default font type and size. Header and footer lengths are set from this dialogue box, as are defaults for the find/replace command. Other parameters here include a pagination toggle, rulers toggle, heading markers as diamonds or numbers and wrapping to fit the current window or the active ruler.

You can have many windows open simultaneously, and a "duplicate window" function lets you look at the same text formatted different ways on the same screen. Text or graphics can be cut to the clipboard and pasted into another document, so moving data is easy.

A "print options" dialogue box lets you set your left margin to eliminate white space on the page if you wish.

A "mark changes" command makes it easy to find any updates made to a file since a specific date. This is useful if more than one person works on a file, or if you just want to check modified sections for spelling or grammatical errors.

"Just print" simplifies printing a file. Normally, a dialogue box offers formatting and print options. While it is only a minor inconvenience to click on the OK box, this function cuts that step.

A word count function displays the number of paragraphs, words, characters and average number of letters per word. You can designate a divisor and the program will divide the number of characters by the number specified. This is a nice feature for professional writers.

MacWrite has no provision for entering a forced page break. MindWrite does. MindWrite also offers table of contents generation. Too bad it doesn't also do an index and spell checking, but how much can you ask of a $125 program?

Even leaving the program is improved. A "close all" function assures that you don't lose anything when you quit MindWrite, and a launch command automatically loads the next program you would like to use, thus bypassing the finder.

MindWrite seems to be a word processor aimed at writers. It has many features that would make it a perfect writing tool for me, including the outlining and word counting. I would recommend it for managers who like to handle their own correspondence or anyone who does creative writing.

This doesn't mean MindWrite is the best program for use in an office, however. The lack of a merge function would make it useless for mailing list applications. It wouldn't be attractive for repetitive forms that require only minor changes, either.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Trademarks: Apple, Imagewriter, MacWrite (Apple Computers Inc.); Macintosh (McIntosh Laboratories Inc., licensed to Apple Computers Inc.); MindWrite (MindWork Software); ThinkTank (Living Videotext Inc.).

GO OLI or circle 22 on the Reader Service Form.

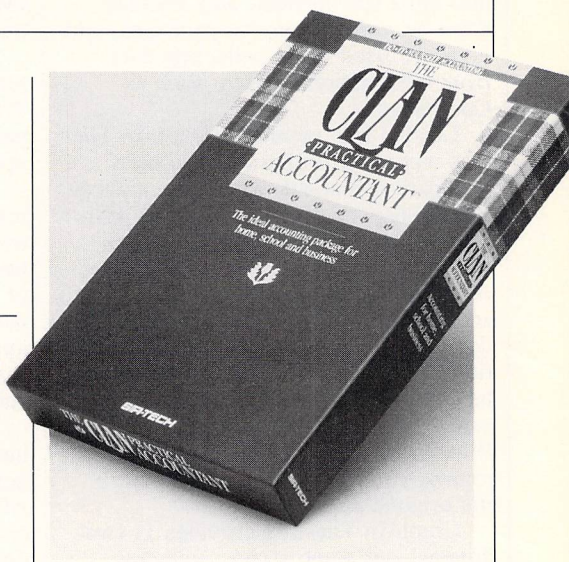
Clan

Practical Accountant for Apple Computers

Sir-Tech Software
P.O. Box 245
Ogdensburg, NY 13669
315/393-6633

Computers: Apple II Series and Franklin Ace 2000 Series; version for IBM PC and compatibles to be available soon.
Operating System: Apple DOS 3.3.
Media: Program runs from single diskette; separate practice diskette included.
Copy Protection: Protected; one backup diskette included; replacement diskettes available for $7.50
Required Peripherals: Two diskette drives.
Other Requirements: Minimum 64K of RAM.
Optional Items: Printer and 80-column card with suitable monitor.
System used for test: Apple IIe with two diskette drives, Apple color monitor and Epson FX-85 printer.
List Price: $79.95 (price of the forthcoming IBM version not yet determined).

Reviewed by Brian D. Monahan



A user's first introduction to Clan Practical Accountant comes from following instructions in its tutorial guide, by which one first creates a practice diskette for use with the tutorial. That diskette provides a limited version of the full program, capable of handling 12 accounts and 100 transactions. However, one can create as many practice diskettes as desired, so they actually can serve as demos for the program.

The full program is menu-driven and easy to use. As few as two or as many as 128 accounts can be created, and the number of accounts can be changed as your needs change. The number of transactions is unlimited. As one diskette is filled, the program automatically copies accounts forward to another diskette.

Error-checking routines are outstanding. For example, assume that account 410 is the account against which you charge entertainment expenses. When entering a check, you'll be asked for the account against which the money should be charged. As soon as you type the "0" in "410," the program completes the rest of the line to read "410 ENTERTAINMENT."

To make things even simpler, it is not necessary to remember all the account numbers. If you were to start typing "ENTERTAINMENT" in the above example, the line would be completed as soon as you typed enough

letters to make a recognizable, unambiguous entry. Typing "ENT" probably would be enough.

On the other hand, if you attempt to charge a check to an account that does not exist, the computer begins to beep when you enter the first incorrect letter. Thus, if you type "ENX," the system refuses to accept the "X" if there is no account name that begins with those three letters.

CPA produces four types of reports: asset, liability, income and expense. All reports can be printed on the screen or on a printer. Wide-format spreadsheet-style reports are available on most dot-matrix and wide-carriage daisy-wheel printers.

The program comes with extensive documentation, and first-time users may find it a bit disconcerting when numerous booklets, charts and labels fall out of the newly opened package. The version I tested also contained two addenda sheets, both describing enhancements to the program.

Four booklets take a user through the basics of the program and of accounting. The first booklet covers basic accounting terms. It carries a prominently displayed message, "Professional accountants are respectfully asked not to read this Guide." The other booklets provide a tutorial, a reference guide, and a question and answer guide. I found the question and answer guide especially helpful. It anticipates questions users will have about the program, about accounting and about the way the program does accounting. The documentation also includes a wall chart.

I have served as a consultant for the installation of several computerized accounting systems, and all installations were accomplished without my learning any accounting. CPA taught me quite a bit of accounting, and that experience suggests that this program can be useful as a learning tool for upper-level secondary school or college students. It also is reasonable to assume that those who wish to apply the principles of accounting to financial management at home can do so with Clan Practical Accountant.

CPA was written in Apple Pascal. The program suffers from the limitations of the computer on which it runs. Since memory space is limited, disk accesses are frequent, and they are slow. To the program's credit, CPA does seem to push the Apple to the limits of its ability. The forthcoming IBM version, which will be written in Turbo Pascal, promises to be far faster and easier to use because of the increased capabilities of the hardware.

The fact that the program absolutely requires two disk drives suggests that CPA is a program for serious users.

Overall, Clan Practical Accountant is a valuable program. It adheres to the principles of accounting yet provides those with no background in accounting with easy-to-follow instructions for using the program. The most serious limitations (speed and disk capacity) are functions of the Apple hardware, not the software.

Clan Practical Accountant can serve as a useful tool for serious home budgeting or for small-business users. It also seems especially appropriate for accounting courses at high school and junior college levels, which are markets the developer should consider.

Brian Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He teachers undergraduate courses in computer science and graduate courses in Iona's masters program in educational computing.

Trademarks: Apple II and Apple IIe (Apple Computer Inc.); Clan Practical Accountant (Sir-Tech Software Inc.); IBM and IBM PC (International Business Machines Corp.); Epson FX (Epson America Inc.); Turbo Pascal (Borland International Inc.).

GO OLI or circle 23 on the Reader Service Form.

USE YOUR COMPUTER TO STOP SMOKING NOW!

All the help of an in-person stop smoking clinic is as close as your keyboard.

Kick the habit in four painless weeks

DON'T LIGHT UP

GO NOSMOKE

THE STOP SMOKING SYSTEM

A Joint Project of
BEHAVIORAL HEALTH SYSTEMS, INC. & ROBERT WALTER COMMUNICATIONS, INC.

© 1987

GO OLI or circle 24 on the Reader Service Form.

Electronic Edition Software Reviews

The following reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any CompuServe Information Service prompt.

Analyze! Spreadsheet Update
Manufacturer: *Micro-Systems Software, Inc.*
Computer: *Commodore Amiga.*

Record Master Database
Manufacturer: *WOODSoftware*
Computers: *Commodore 128 or Amiga.*

Silk Electronic Spreadsheet
Manufacturer: *Daybreak Technologies*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

AutoSketch Entry-Level CAD
Manufacturer: *Autodesk, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

WordPerfect Library
Manufacturer: *WordPerfect Corp.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Vantex Word 2.0 Update
Manufacturer: *Vantex Data Systems*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Personal Expression Documents And Transparency Processor
Manufacturer: *IBM Personally Developed Software*
Computers: *IBM PC, PC-XT, PC-AT, Portable PC and PCjr.*

CP-Edit Text Editor
Manufacturer: *IBM Personally Developed Software*
Computers: *IBM PC, PC-XT, PC-AT, PCjr., Portable PC and 3270 PC.*

Professional Font Facility
Manufacturer: *IBM Personally Developed Software*
Computers: *IBM PC, PC-XT, PC-AT, Portable PC and 3270 PC.*

The Complete Desktop Publisher

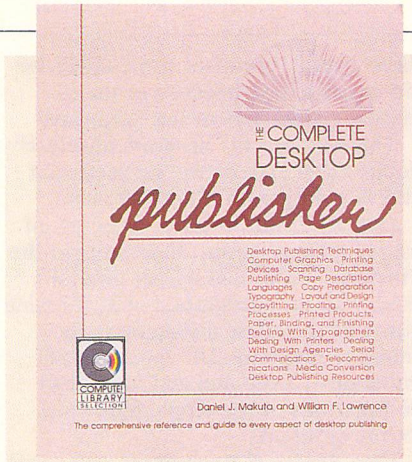
By Daniel J. Makuta and
William F. Lawrence
COMPUTE! Publications, 1986
293 pages, $19.95 (softcover)
Reviewed by Michael Naver

As computer-based desktop publishing systems develop fancy features, it is logical that books on desktop publishing should follow suit. This is true of *The Complete Desktop Publisher*.

Unlike earlier books on the subject reviewed in recent months, this one goes into some detail on technical aspects not likely to engage the attention of the casual desktop publisher. On the other hand, *The Complete Desktop Publisher* covers a complex subject with admirable thoroughness.

The authors set out to describe features of both low-end and high-end systems. As they note in their preface, they are not wedded to any one approach: "Don't be misled into thinking that only one type of computer or one particular software package is the answer. There is no one system."

Their other message is that you don't have to automate the entire publishing process to justify the purchase of desktop publishing equipment. "If you can automate any part of the publishing process—saving time and money without sacrificing the level of quality you need—you're a success story in desktop publishing," they note.



Offering tips: *Makuta and Lawrence*

The authors review basic information important to any small publisher, including typography, layout, design, proofreading, paper and binding and working with printers, typesetters and design agencies. These chapters make up a useful publishing primer. But the real value of *The Complete Desktop Publisher* is in the well-informed, up-to-date survey the authors provide for the reader who needs and can absorb more technical information.

For example, the authors explain and compare different page description languages (PostScript and InterPress), listing the pros and cons of each. They give the same kind of treatment to text formatting, paint and draw graphics programs, laser and dot-matrix printers, serial communications, telecommunications and converting dissimilar disk formats. There is even a chapter on how to program in dBase III to transfer the contents of a database into formatted text to print a catalog.

For many who look to desktop publishing as a way to meet their modest publishing demands for flyers and basic newsletters, *The Complete Desktop Publisher* probably will tell them more than they want to know. Those whose needs—and budgets—are more ambitious will find it an authoritative resource.

Michael Naver of Baltimore, Md., is editor of Hi-Tech Alert for the Professional Communicator, *a newsletter advising corporate communicators and public relations counselors on uses of new technology. His CompuServe ID number is 70007,621.*

dBase Demystified:

Applications and Solutions to Real Problems

By Lan Barnes
Byte Books/McGraw-Hill, 1986
310 pages, $19.95 (softcover)
Reviewed by Brian Monahan

DBase Demystified is different from the many books published on dBase because it assumes that the reader has at least a working knowledge of this database management program.

Although *dBase Demystified* is aimed at experienced users, the first three chapters provide a review of dBase before moving on to the development of simple applications. Those chapters are no substitute for the manual or for an introductory text, but they are clearly written and provide a good review.

Part II includes eight chapters that detail the development of a client manager system. The ultimate program, which appears in the final chapter of the section, includes 2,000 lines of code. Barnes uses this program to introduce techniques that cannot be covered by presenting short modules.

Part III includes an extensive glossary of dBase commands and functions. It covers dBase III/III+ but also explains how commands and functions in the newer versions differ from their dBase II counterparts.

As a user who has "moved up" from dBase II to III, I found this section to be extremely helpful. Each entry in the section contains the correct syntax and a commentary that explains the command or function, suggests possible uses and warns the user of misuses. The dBase III manual contains a similar section, but this one is more clearly written and easier to use. In fact, this 80-page glossary alone makes *dBase Demystified* a worthwhile investment.

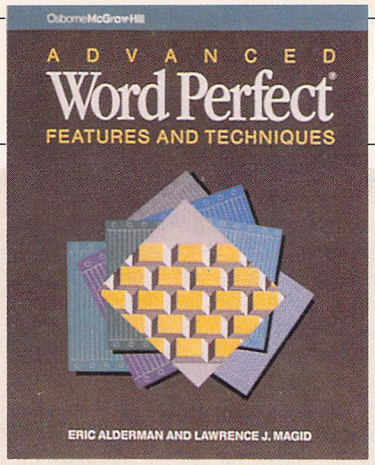
However, *dBase Demystified* suffers from two limitations. First, dealing with three versions of dBase in one book is confusing (the cover indicates that it is for users of dBase II, III and III+) as there are significant differences between the versions. For example, programs written in dBase II will rarely run in dBase III. Barnes addresses this problem by labeling chapters specific to one dialect and by providing alternate code in chapters of a more general nature.

The book does, however, seem to be slanted more toward the III/III+ version than the II. Although the version being referenced is always made clear, readers may find that they have to wade through information that is irrelevant for their purposes.

A second limitation results from Barnes' decision to use a comprehensive Client Manager package to teach the development of dBase applications. Those who read the book from cover to cover will find the example to be clear and helpful. But for those who intend to use the book as an occasional reference, the use of a such a comprehensive model may make it difficult to get the needed information quickly.

Overall, it is a worthwhile book.

Brian D. Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He has published dozens of articles on computing in scholarly and popular journals.



Tackling techniques: *Alderman and Magid*

Advanced WordPerfect:

Features and Techniques

By Eric Alderman and
Lawrence J. Magid
Osborne/McGraw-Hill, 1986
311 pages, $18.95 (softcover)
Reviewed by Richard Danca

If you use WordPerfect frequently, you probably need this book. True to its title, *Advanced WordPerfect* takes you beyond the program's well-written and detailed users manual to explain how to use some of WordPerfect's powerful but complex abilities.

The book often does a clearer job than the users manual. For example, the book's installation appendix tells you that WordPerfect runs faster if you start it with the WP/R (for RAM) option, which loads it entirely into memory; WordPerfect hides that information on page 44 of the 48-page "Installation and Appendixes" supplement. In fact, *Advanced WordPerfect's* installation appendix and the "Basics Refresher" chapter could let many users get started without the program's own manual, though they would need it for learning how to perform such important functions as creating and editing endnotes and footnotes.

The ability to use macros, defining a key or keys to do the work of many, is one of WordPerfect's strengths, and—wisely—is a major focus of *Advanced WordPerfect*. Two chapters are devoted specifically to macros. One of these presents a library of macros that do dozens of tasks (the authors also sell a disk version of this macro library). Macros are an important part of other chapters as well.

The book's chapters on other WordPerfect features, including merging, outlining, columns and math, also are good. In addition, there is a chapter on WordPerfect Library, a separately sold collection of related programs.

The book is nicely made and printed, with clean type and lots of white space. Thinner than a three-ring manual, it also is easier to use. It has a better index and includes a tear-out list of WordPerfect key names and a list of the program's hidden codes.

On the down side, once the authors explain which key to press to make the program do something, they refer to it from then on only by the function name, for example, Exit. Granted, WordPerfect's on-screen help follows this pattern and the book is clearly aimed at advanced users, but the users manual wins points for always telling you to use the F7 key to exit.

Also, this edition of *Advanced WordPerfect* covers WordPerfect 4.1, so it is a little out of date. That means it does not include information on the new features of version 4.2, such as document comments and summaries. Still, *Advanced WordPerfect* is a valuable and worthwhile book.

Richard Danca, a writer from Washington, D.C., is microcomputer editor of Government Computer News.

Electronic Edition Book Reviews

The following book reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

Mastering Disk Operations on the Commodore 128, *by Alan R. Miller, Sybex.*

Tips for Microsoft Excel, *by Douglas Cobb, Judy Mynhier and Gena Berg Cobb, Microsoft Press.*

Using dBASE III Plus, *by Edward Jones, Osborne/McGraw-Hill.*

The Stock Market Investor's Computer Guide, *by Michael Gianturco, McGraw-Hill Book Co.*

Computers on the Job: Managing the Human Side, *by C. Patrick Fleenor and Robert E. Callahan, Random House.*

Command Performance:

Microsoft Excel

By Douglas Hergert
Microsoft Press, 1986
532 pages, $24.95 (softcover)
Reviewed by Cheryl Peterson

After reading numerous books about Excel, it takes a lot to impress me. This book impressed me. In fact, I would call it *The Excel Encyclopedia* (and I'm not sure why Microsoft didn't.)

Command Performance defines all of the commands, menu options and functions, as well as generic terms used by spreadsheets and databases.

The alphabetized entries make it easy to find what you are looking for. The book's extensive cross-referencing is admirable, and there is an impressive index.

Each entry is coded with a graphic symbol to let you know quickly whether it is a general menu command, charting menu command, worksheet function, macro function or a dictionary entry. This last category is for general entries of common terms, such as arguments, error values, names and macros.

Individual entries start with the format necessary to use the command or function and are followed by complete definitions. Then examples show how each entry is used. Any prompt boxes that might appear are shown and the alternatives offered are explained. Any significant error messages also are explained. Finally, other comments or references are presented. Of course, not every entry needs all this information.

A special feature of the book is its use of two colors. The text and illustrations are in black; entry names and graphic symbols are in reddish brown. The illustrations—LaserWriter printouts of screens (including charts and graphs)—are well done. The charting and graphing illustrations made the book easier to read. While it is a reference work, you can pick up good tips by reading through it. Because of the graphics, you don't have to be sitting in front of the computer to get the most out of the book.

Command Performance: Microsoft Excel may be the best $25 add-on that Excel users can buy. One thing bothers me, though. It is published by Microsoft Press. So why doesn't Microsoft send this one out with the manual? It definitely should be part of the standard Excel documentation.

But buy it if you must. It is worth it.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Model T Modem

Holmes Microsystems has introduced the Correspondent Model T, an internal direct connect modem for the Toshiba model 1100+ and 3100 laptop computers.

The Correspondent plugs inside the Toshiba with no modifications to the computer. Compatible with the industry standard Hayes software commands, the modem allows the use of most popular communications software without tedious and error-prone modifications. The Correspondent slides into a slot provided inside the Toshiba. Installation requires only a Phillips screwdriver. Retail price is $339.

For information, contact Holmes Microsystems Inc., 7050 Union Park Center, Suite 610, Midvale, UT 84047; 800/443-3034 (nationwide) or 801/572-6865 (in Utah).

SideKick Enhanced

A new version 2.0 of Borland's SideKick: The Desktop Organizer for the Macintosh includes Outlook, an outline processor, MacPlan, a spreadsheet desk accessory and XMODEM file transfer communications protocol.

Outlook can be used as a desk accessory or application. Its resume feature provides the ability to open all documents from a previous work session. MacPlan combines spreadsheet and business graphics capabilities and operates as a desk accessory on top of other applications or on its own. Support of XMODEM file transfer communications protocol has been added to the MacTerm accessory for easy file transfer. Retail price is $99.95. Registered owners can upgrade for $34.95.

For information, contact Borland International Inc., 4585 Scotts Valley Dr., Scotts Valley, CA 95066; 408/438-8400 or GO BOR on CompuServe.

InfoHost Online

A-Comm Electronics has introduced a versatile, online information software package that runs on the IBM PC and converts the computer into a powerful online information host system.

Called InfoHost, the product allows up to eight simultaneous users to access a customized database by modem. Included is a complete fully featured relational database/file management system from which a customized database can easily be created, updated or accessed.

For information, contact A-Comm Electronics Inc., 377 Rt. 17 S., Hasbrouck Hts., NJ 07604; 201/288-7885.

The Envelope Please

The Envelope Please from Quaid Software Ltd. is a memory-resident program designed to end the time-consuming and often frustrating job of trying to print envelopes.

The program makes printing an envelope as easy as feeding it into the printer. Once a letter has been created, a simple key command brings up an on-screen frame that the user positions over the name and address to be printed on the envelope. In addition, The Envelope Please prints sideways for ease of operation.

The program sells for $39 and operates with WordStar, Symphony, dBase and Sidekick and runs on an IBM PC, PC-XT and PC-AT computers with a number of daisywheel and dot-matrix printers.

For information, contact Quaid Software Ltd., 45 Charles St. E., Third Floor, Toronto, Ontario, Canada M4Y 1S2; 416/961-8243.

Multi-user Modem

A unique, PC-based multi-user modem and communications software package has been introduced by OmniTel Inc.

The package consists of OmniTel's NetCom Q1200 Series modem, which is four modems on a single card and DMA's Chairman, a multi-user bulletin board software system. By having four modems on a single card, multi-users can save on modems, serial ports and cables by a factor of four. Retail price for the entire package is $1,890.

For information, contact OmniTel Inc., 5414 Randall Pl., Fremont, CA 94538; 415/490-2202.

Unit*Assistant

Unit*Assistant from Thermal Systems Analysis is a memory resident unit conversion reference for both technical and non-technical users.

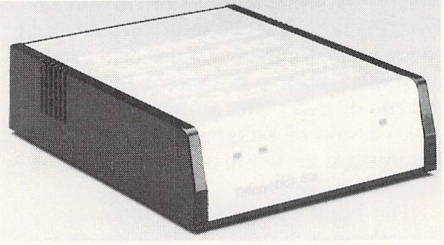
Designed for use on an IBM PC, PC-XT, PC-AT and compatibles, the program can be accessed instantly even while running other applications. It uses a unique algorithm to break down request conversions into their base units and performs a conversion on each of them. It can then determine the appropriate factor for converting the input units to output units. Retail price is $75.

For information, contact Thermal Systems Analysis Inc., P.O. Box 193, Broomfield, CO 80030; 303/469-8507.

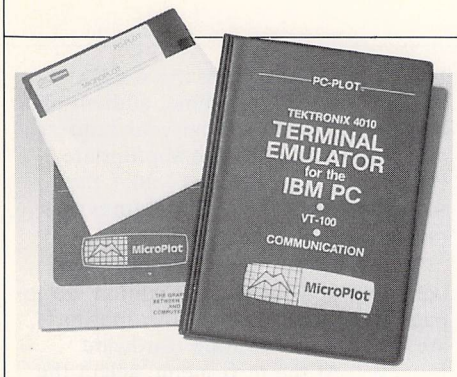
Error Controller

A low-cost, stand-alone error controller that allows the addition or error correction to almost any external modem is available from Telenetics Corp.

Called the Model ECs, the unit provides Microcom Networking Protocol to levels 1, 2 and 3. It assumes answer or originate modes and provides a constant speed option at the user end via internal buffer memory and flow control. It also allows the economical addition of error correction to any stand-alone asynchronous modem of any make. Retail price is $195.



For information, contact Telenetics Corp., 895 E. Yorba Linda Blvd., Placentia, CA 92670; 714/524-5770.



Terminal Emulation Graphics

MicroPlot has introduced PC Plot IV, a terminal-emulation graphics software package with expanded communications capabilities.

Designed for the IBM PC and compatibles, PC Plot IV provides the user with script language and XMODEM file transfer capabilities. In addition, it allows access to more online help with features providing individualized help screens for specific applications. Retail price is under $150.

For information, contact MicroPlot, 659-H Park Meadow Rd., Westerville, OH 43081; 614/882-4786.

Modem Server

Mirror Technologies has introduced ModemShare, a modem server that will allow network access to a single modem much like network users might currently share a single printer.

By using ModemShare, separate phone jacks will no longer have to be run from the KSU or PBX to each station, and each station will not need a separate modem.

For information, contact Mirror Technologies, 2209 Phelps Rd., Box 304, Hugo, MN 55038; 612/426-3276.

Mapit

Mapit from Questionnaire Service will produce filled and labeled maps on any printer or an Hewlett-Packard plotter.

Designed for the IBM PC and compatibles, Mapit includes map outline files for the United States, Canada, Europe, Asia, Africa, South America and Australia. Retail price is $95.

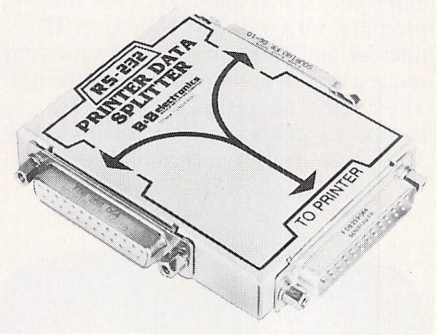
For information, contact Questionnaire Service Co., Box 778, East Lansing, MI 48823; 517/641-4428.

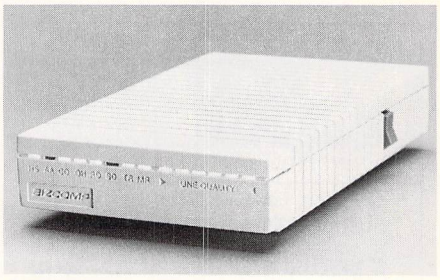
Printer Data Splitter

B & B Electronics has introduced a Printer Data Splitter for RS-232 users with multiple computers.

Model 232PDS allows two computers to share the same serial printer, providing increased flexibility with minimum cost and space requirements. Each computer can remain connected to the printer simultaneously, eliminating the need for repeated hook-ups. Self-powered from the RS-232 port, the unit may be left permanently installed. Retail price is $44.95.

For information, contact B & B Electronics Manufacturing Co., 1500P Boyce Memorial Dr., Ottawa, IL 61350; 815/434-0846.





Modem Bus

Bizcomp Corp. has introduced a modem "bus," which is a standardized connection for expansion options, within its two new 2400 bps modems.

Called the Bizcomp IntelliModem 2400 (external) and the IntelliModem 2400 PC (internal), the modems are fully Hayes compatible and sell for $599. With the bus, future features, such as digital voice and proprietary error correction protocols, can be plugged in.

For information, contact Bizcomp Corp. 532 Mercury Dr., Sunnyvale, CA 94086; 408/733-7800.

Electronic Edition Product Announcements

The following new product announcements are available this month on *Online Today Electronic Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

MaxPak, *utility package for the Atari ST, SoftWerx Publishing.*

FastTRAP, *three-dimensional printing device for the IBM PC, PC-XT, PC-AT and compatible computers, MicroSpeed*

RightWriter Version 2.1, *automatic document proofreader for the IBM PC and compatibles, RightSoft Inc.*

Padlock Mouse, *mouse that provides hardware security for software products, The Torrington Co.*

Disk Technician, *automated artificial intelligence software system for the IBM PC, PC-XT, PC-AT, PCjr and compatibles, Prime Solutions Inc.*

TopDOS, *file and directory manager for PC/MS-DOS systems, FrontRunner Development Corp.*

PARTNER 64, *cartridge-based desktop accessory for the Commodore 64, Timeworks Inc.*

Cadpak, *software for the 1351 mouse for the Commodore 64 and 128 computers, Abacus Software.*

Commodore Modem

Trans Com. has introduced the TCM-1200H Hayes-compatible modem for the Commodore 64 and 128 computers.

Features of the modem include autoselect 300 and 1200 baud and originate/answer modes. In addition, the TCM-1200H includes eight LED status indicators and eight DIP switches on the back panel, one of which will keep the modem from answering the phone when not in use. Retail price is $179.95.

For information, contact Trans Com. Inc., 703-13 Annoreno Dr., Addison, IL 60101; 312/543-9055.

Direct From Our Roaster To You
C•O•F•F•E•E EMPORIUM
Purveyors of Gourmet Coffees & Teas
- Gifts for Family, Friends and Business Associates
- We Offer the World's Rarest Coffee - Jamaican Blue Mountain
- Try Our Sampler Packs

Come Shop With Us!
GO COF

SOFTWARE for PC's
30% OFF!
Most major Brands
CALL 800-631-9690
In CT 203-366-1966
(Satisfaction or money back)
CALL NOW & GET FREE
64-page POCKET ROAD ATLAS with any order
TSI Company Inc.
1322 North Ave., Bridgeport, CT 06604

Human Sexuality (GO HSX)
Information • Advice
Enjoy safe sex! Avoid AIDS, herpes, other diseases. Read our VD Manual (GO HSX-10130).

Universal Data Systems
MOTOROLA INC.
Information Systems Group

Looking for Some Good Reading Material?

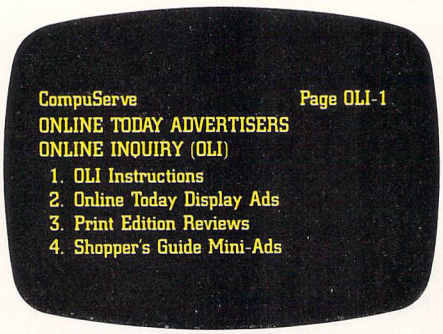
You'll find more computer book reviews in *Online Today Electronic Edition*. Just type GO OLT-240 from any prompt on the CompuServe Information Service and choose this month's reviews from the main menu.

ONLINE TODAY

Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.



Display Ads

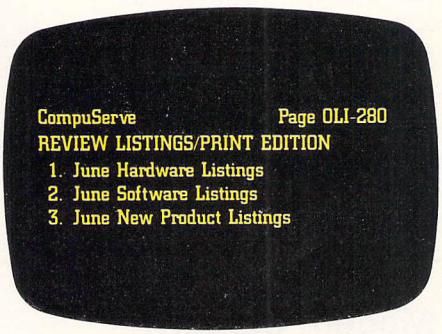
GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as June Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

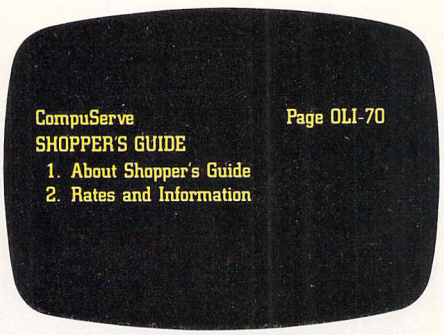
Requests to these sections will be stored and forwarded by traditional mail once each month.



Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.



***Note:** Additional requests during the same session will not require you to re-enter your name and address.

INFORMATION

The advertisers and manufacturers of the products appearing in Online Today *will be pleased to send additional information about their products or services—at no cost to you. Make your selection by circling the advertiser or product by number on the form below. Fill in the requested information and mail to:* Online Today, *Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.* Online Today *will see that your requests are forwarded promptly. You may get a faster response by using the Online Inquiry service system. Simply enter GO OLI at any prompt on the CompuServe system and follow the OLI prompts. Your request will be forwarded.*

Inquiry Number	Advertiser/Product	Page Number
	A-Comm Electronics Inc.	56
3	American Express	3
6	AT&T	7
7	AutoVision	10
	B&B Electronics Manufacturing	57
	Bizcomp Corp.	57
	Borland International Inc.	56
2	CACI/Instant Demographics	1
	Coffee Emporium	58
20	Communication Electronics	49
10	Comp-U-Store	21
9	DAK	12
17	FiveStar Electronics	46
24	Healthcom	53
15	Hewlett-Packard Co.	44
	Holmes Microsystems Inc.	56
	HSX Forum	58
8	Max Ule	11
	MicroPlot	57
22	MindWork Software	51
	Mirror Technologies	57
21	New England Software	50
1	NewsNet	Cover 2
26	Official Airlines Guide	Cover 4
	OmniTel Inc.	56
14	Online Computer Store	50
25	PaperChase	Cover 3
	Quaid Software Ltd.	56
	Questionnaire Service Co.	57
12	Quick & Reilly	29
23	Sir-Tech Software	52
16	Solutions	45
13	Telelearning	41
	Telenetics Corp.	56
	Thermal Systems Analysis Inc.	56
	Trans Com. Inc.	57
	TSI	58
11	Unified Management	27
4	Universal Data Systems	5
4	Universal Data Systems	58
18	Visionary Electronics	47
19	VM Personal Computing	48

READER INQUIRY

For free information on products or services in this issue of *Online Today*, fill in your name, address, ZIP code and phone number. Then circle the number that corresponds to the number of the advertisement or article in which you are interested.

CompuServe subscribers can request information electronically by entering GO OLI at any prompt.

(Please print or type)

Name _____

Company Name _____

Address _____

City _____

State _____ ZIP _____ Business Phone _____

Mail to: Online Today, Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.

Circle inquiry number from this issue only

1	21	41	61	81
2	22	42	62	82
3	23	43	63	83
4	24	44	64	84
5	25	45	65	85
6	26	46	66	86
7	27	47	67	87
8	28	48	68	88
9	29	49	69	89
10	30	50	70	90
11	31	51	71	91
12	32	52	72	92
13	33	53	73	93
14	34	54	74	94
15	35	55	75	95
16	36	56	76	96
17	37	57	77	97
18	38	58	78	98
19	39	59	79	99
20	40	60	80	100

June issue, not valid after September 1987.

Real-time Chatting Has Its Protocols

As subscribers to CompuServe, our open channel to the world is pretty dramatic.

We can carry on national and even international correspondence through electronic mail. We're all just a couple of keystrokes away from hundreds of electronic resources for the latest news. Through the forums, we can be on a first-name basis with experts in different fields.

Perhaps even greater is our potential for real-time talk. Through conferencing on the forums and the CB Simulator, we have become accustomed to having global cocktail parties.

For a long while, one of the few things missing from our various online tools was a means for more formal electronic conversation. Initially, the conferencing program was at its best in casual gabfests. Anyone who accessed the CB Simulator or a forum conference area could "speak" by simply typing a message and then "listen" by reading the subsequent replies. That everyone could "talk" at the same time merely enhanced the fun for most users (and even led to the evolution of some interesting games as people began playing with the medium itself).

The fact that many forum administrators have been able to use the same software for more structured conferences is an example of cooperation between the subscribers. Rather than computers, it was the people themselves who created conventions that allowed the medium to be used for formal talk. At these gatherings, it has become understood that the communications will be improved if those in attendance do not exercise their electronic right to all speak at once, but instead take turns asking their questions.

The protocols for this kind of conferencing—methods for electronically "raising your hand" for a question and then waiting to be recognized by the discussion leader—still are in use nightly in conferences around the system, and they work well as long as everyone knows the house rules. However, with the number of subscribers growing so rapidly and real-time communications being so popular, conferences sometimes break down into discussions about the forums themselves.

Earlier this year, the product development staff at CompuServe came up with a new tool for us, CompuServe's Electronic Convention Center , a feature designed for large, scheduled real-time gatherings.

This facility, accessible by typing GO CONVENTION at any prompt, is an electronic lecture hall where you can attend three kinds of pre-scheduled events:

- Lectures. This is a one-way communication. Once a scheduled lecture begins, only those authorized by the moderator—that is, the *speakers*—can transmit questions; everyone attending can read what's being said. This mode, designed for announcements and speeches, was inaugurated earlier this year when Neil Shapiro's Micronetworked Apple Users Group (MAUG) provided a real-time link to Los Angeles for announcements of the latest Macintosh computers. Nearly 300 people read the transcript of Apple Computer executives' remarks as they were being made. Moderated presentations. Established for panel discussions, this mode is less restrictive than lectures, because those attending can communicate with the speakers. Usually there is a moderator and at least one speaker (though sometimes they may be the same person). The speakers make opening remarks, then the moderator opens the discussion for questions "from the floor." Special commands are available to allow listeners to signal the discussion leader and be recognized. The software even allows the moderator to regulate the length of time allotted for each question, thereby keeping a rein on how long the event goes on.
- Roundtables. This is the least restrictive of the Convention Center modes. Like the conferences in the forums, casual chatting is permitted throughout the conference.

If you're already familiar with the commands of the CB Simulator and conferencing in the forums, you're all set for the Convention Center, because the same commands are used, along with a few extras.

For instance, by typing /USERS GUESTS at a Convention Center event you can find out the names of those speakers who have logged in. The /STATUS command, in addition to reporting the number of people in attendance, tells you how long the conference has been in progress. A new /BUFFER EDIT followed by a /BUFFER SEND command makes it possible to transmit more than one 80-character line at a time in this area of the system.

In moderated conference, there's a new /QUESTION command that automatically signals the moderator for you, and a /LOOK command, which lets you see how many questions are still ahead of you in the queue.

As noted, conferences in the Convention Center are pre-scheduled and you can find out about upcoming events by typing GO CONVENTION. A subsequent menu item provides a list of announcements, reporting the date, time and expected length of each presentation, as well as the name of the sponsor and invited speakers.

The list also tells you if a conference requires a reservation and whether there is a fee. If you plan to attend a reserved conference, access the CONVENTION menu's "List Conferences/Make Reservations" option. Then type RESERVE followed by the option number of the conference you're interested in. If later you need to cancel a reservation, use the "Review/Cancel Reservation" option on the CONVENTION menu. (Note that you must cancel reservations 24 hours before a conference in order to receive a refund if any fees are charged.

In the less-formal Roundtable discussion, where open chatting is permitted throughout the presentation, organizers ask that we use a little electronic etiquette in our questions and answers—that is, the same protocol that has evolved from years of forum conferencing.

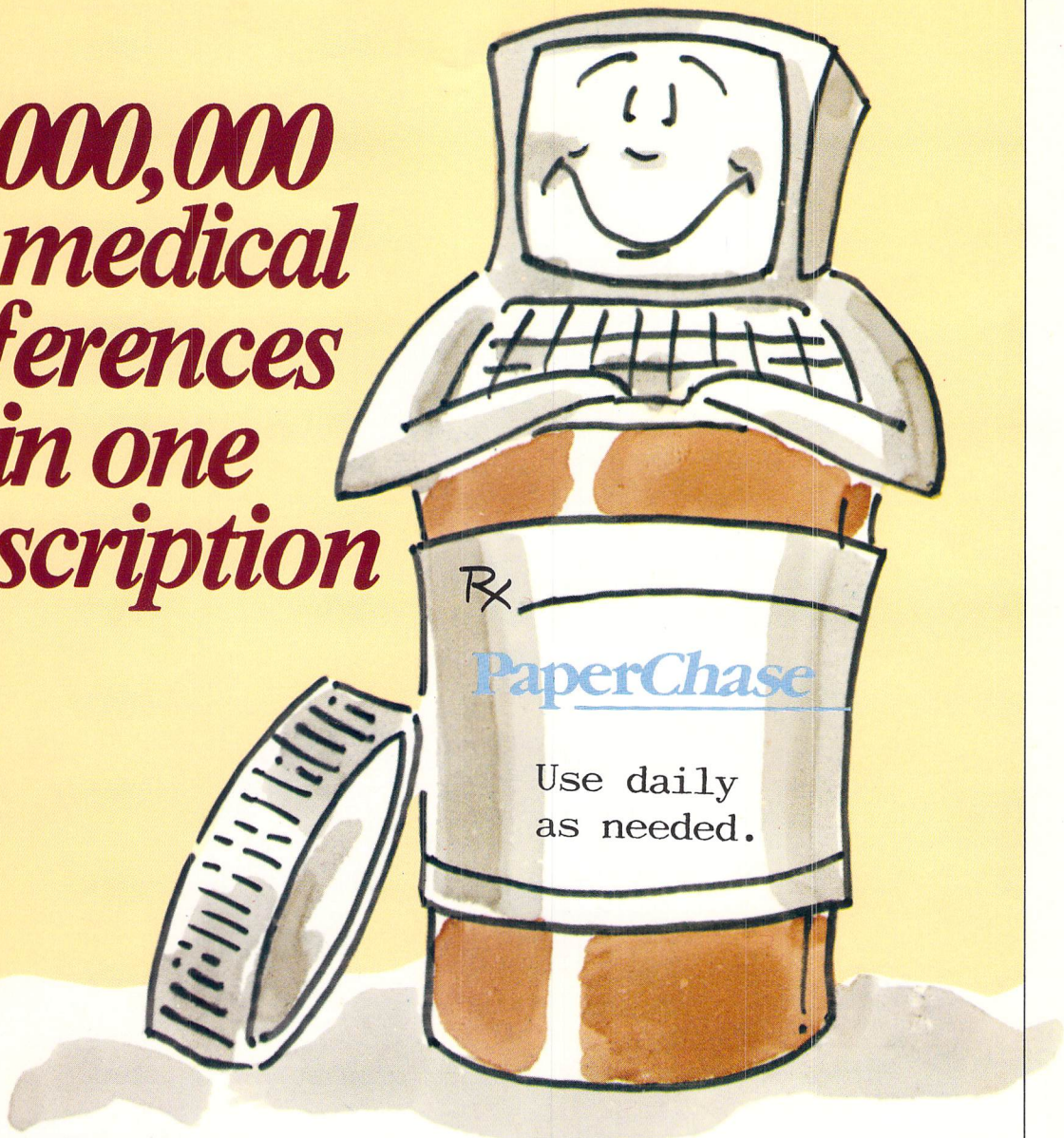
Essentially, this means announcing your interest in asking a question—by typing a question mark (?)—and then waiting to be called upon. After you receive the "go-head," it's a good idea to type "OK," letting others know that you're now composing your question (and that the delay doesn't mean you've fallen asleep).

Finally, once you have asked your question, follow it by the letters "GA," meaning, "go ahead—I've finished what I have to say."

The Convention Center operates apart from any other service, but most of the events booked there are sponsored by CompuServe's major forums. That means that, in addition to the center's own announcements, you can watch the message boards of your favorite online hangouts for news of upcoming events.

Charles Bowen, co-author of How to Get the Most Out of CompuServe *and* CompuServe for IBM Power Users, *is a contributing editor of* Online Today. *His CompuServe User ID number is 70007,411.*

5,000,000 medical references in one prescription



PaperChase, the user-friendly computer program that gives you instant, easy access to up-to-date references in medicine, dentistry, nursing and health care management.

Go PCH...

to access MEDLINE, the National Library of Medicine's index to biomedical literature.

- Display references and abstracts online
- Request reprints of any article in the database

Available around the clock...via your terminal or personal computer for a surcharge of only $24/hour

...a little help from a friend

PaperChase

Beth Israel Hospital • 330 Brookline Ave. • Boston, MA 02215 • (617) 735-2253 or 76703,2003 on EasyPlex

GO EBB or circle 25 on the Reader Service Form.

STAND IN LINE AT THE AIRPORT.
GO BACK TO THE BEGINNING. YOU DIDN'T CHECK OUT OAG'S BOOKING CAPABILITY.

CHECK AVAILABILITY AND BOOK FLIGHT.
NOW YOU'RE MOVING!

ARRANGE FOR CONVENIENT TICKETING.
YOU'RE ALMOST THERE!

REQUEST CAR RENTAL AND HOTEL RESERVATIONS.
TAKE A GIANT STEP FORWARD!

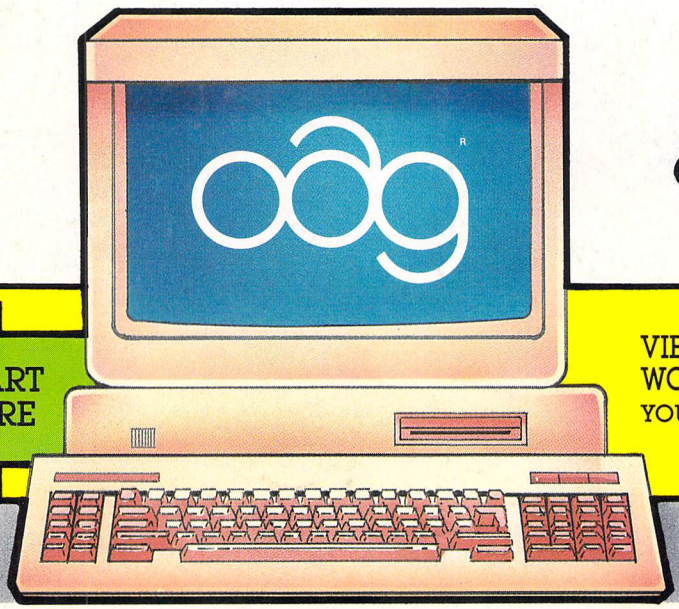
Win at the Travel Planning Game with the OAG Electronic Edition

SELECT THE LOWEST FARE
KEEP MOVING AHEAD.

FIND THE BEST FLIGHTS FOR YOUR NEEDS.
MOVE AHEAD ONE SPACE.

START HERE

VIEW HOTELS WORLDWIDE—ON-LINE!
YOU'RE A WINNER!



It's a smart move.

These days, you want to stay ahead of the travel planning game.

You want the best fares. The most convenient flights. And the best way to book your reservations and arrange for ticketing.

That's why today, more than ever, you want the OAG ELECTRONIC EDITION. You can check out virtually every flight in the world — plus thousands of North American and international fares ... and choose the lowest fare on the most convenient flight every time.

From there, it's a simple matter to check availability and book your flight 24 hours a day ... and arrange for ticketing. In fact, if you obtain your ticket through Thomas Cook Travel U.S.A. — the OAG ELECTRONIC EDITION's exclusive travel agency — you can even request car rental and hotel reservations!

So make the OAG ELECTRONIC EDITION part of your travel planning game plan.

You'll always come out a winner!

On CompuServe, ENTER: GO OAG

Official Airline Guides

a company of The Dun & Bradstreet Corporation

GO OLI or circle 26 on the Reader Service Form.